Maine's Balance of Representation: Information and Results



Prepared by the Maine Department of Education and the Maine Mathematics and Science Alliance

October 2003



STATE OF MAINE DEPARTMENT OF EDUCATION 23 STATE HOUSE STATION AUGUSTA, MAINE 04333-0023

SUSAN A GENDRON

June, 2003

Dear Maine Educator:

I am pleased to provide a copy of Maine's Balance of Representation: Information and Results to be used as a companion document to the LAS Guide Principles and Criteria for the Adoption of Local Assessment Systems. We decided to release this information when we could simultaneously release our criteria for its use. These results are intended to provide Maine's school administrative units with an option for selecting sample performance indicators to be assessed through the Local Assessment System in order to meet the requirements for the selection and distribution of assessment types as described in the LAS Guide Criterion 1.

The data in this publication are the results from the Department of Education's Two-Day Balance of Representation Institute that was held May 5 and May 17, 2002, at the Bangor Civic Center.

Hundreds of Maine educators participated in a process designed to prioritize the content standards and performance indicators in Maine's Learning Results. Maine's work was based on Dr. Norman Webb's "Criteria for Alignment of Expectations and Assessments in Mathematics and Science Education". Dr. Webb, a researcher from the University of Wisconsin- Madison, attended the May 5, 2002 session and provided the context for Maine's alignment procedure.

Maine's process included three main components: training, independent rating based on training and professional knowledge, and reaching consensus on ratings. Maine educators engaged in this intensive process with a commitment to quality work. They worked long hours to ensure the thoroughness needed for completion.

Many thanks go the Maine educators who participated in this process. Once again they demonstrated a willingness to accept a challenging responsibility on behalf of Maine schools and their students.

We hope you will find this document useful as you make decisions about your Local Assessment System.

Sincerely,

Susan A. Gendron

Commissioner of Education

Suran A Gudeon

OFFICES LOCATED AT THE BURTON M. CROSS STATE OFFICE BUILDING PHONE: (207) 624-66000 FAX: (207) 624-6700 AN EQUAL OPPORTUNITY EMPLOYER
TDD: (207) 624-6800



June 16, 2003

Balance of Representation in Maine

Maine has undergone significant efforts to develop an educational system that will lead to deep and lasting changes in student learning. Central to these changes are the State of Maine's Learning Results. Maine's Department of Education has led one of the country's most noteworthy efforts to raise the level of student achievement. This effort has engaged people statewide in a process to assure that all of the pieces within the system are widely supported and are working in concert with each other. All of this activity has been directed toward enabling Maine students to meet the high expectations set by the Learning Results.

Educational leaders in Maine have taken a sophisticated approach to achieving an aligned system by carefully weighting the importance accorded different learning expectations. They recognize that not all content is equally important. Educators recognize, for example, that the process of reading should be given more emphasis in the elementary grades than stylistic and rhetorical aspects of writing and speaking, which should be given more importance in the later grades. This variation in emphasis should not only be evident in the importance given to specific learning expectations, but similar distinctions in level of emphasis should pervade other central parts of the educational system.

Assessments, curriculum, and professional development should all reflect the balance of representation as found in the Learning Results. The concept of balance of representation takes on greater meaning in a time of declining resources, while what teachers are faced with having to teach their students is steadily increasing. Attending to the balance of representation helps teachers focus on what it is most important for their students to learn, on which content standards have the highest priority, and on how the emphasis on learning outcomes changes as students progress through the curriculum. In carefully addressing the balance of representation throughout the system, Maine has taken an important step in focusing on the content that it is most crucial for Maine's students to learn if they are to meet the challenges of the future.

I have been impressed by the seriousness and thoughtfulness of teachers in Maine who have engaged in assuring there is a balance of representation between the Learning Results, curriculum, and assessments. They have spent long days going over standards, curricula, and assessments to assure that all are in balance.

Norman L. Webb

Senior Research Scientist

Balance of Representation

Establishing the relative **scope** and **importance** of standards to inform curriculum, instruction, and assessment

USE of Balance of Representation Data

From the LAS Guide "Principles and Criteria for the Adoption of Local Assessment Systems"

<u>Criterion 1: Assessment Types – Selection and Distribution</u>

This criterion defines the term "Assessment Types" and lists the rules for their selection and distribution. The following rule is printed under the heading "To fulfill the requirements of this criterion, each school administrative unit must:

 Select a sample of performance indicators based on a method of prioritization. Use Maine's Balance of Representation results (available from the Department) or another method – e.g., the *Measured Measures* procedure or another strategy - to identify high priority or "core" ideas.

The Balance of Representation results referred to in the rule above, are presented in this document. They are intended to provide Maine's school administrative units an option for selecting the sample of performance indicators to be assessed through the Local Assessment System. This document provides a description of the method of prioritization used and documentation of the process and participants, as well as the resulting data.

PURPOSE for establishing Balance of Representation

In order for an assessment system to have content validity, it must be aligned with articulated standards. In the case of Maine's *Learning Results*, that alignment occurs at the Performance Indicator level. One aspect of alignment, Balance of Representation, dictates that the learning expectations (performance indicators) must be assessed in proportion to their **scope** and **importance**. Simply stated, big important ideas should receive greater emphasis than smaller, more peripheral ideas.

A systematic procedure for establishing Balance of Representation maps the "topography" of each discipline, identifying the relative mountains and valleys within the landscape of the *Learning Results*. The procedure is guided by knowledge of the discipline, knowledge of curriculum and instruction, and knowledge of students and developmental considerations.

PROCEDURE for establishing Balance of Representation

The Maine Department of Education convened a conference of Maine educators on May 6 and 17, 2002, with follow-up in June of that year. The process involved ten teachers per grade span per discipline. The groups represented the regions of the state and were selected based on their knowledge of curriculum, instruction, content and, particularly, their understanding of how students learn at different developmental stages. Please see **Appendix A** for a complete listing of Maine educators who participated in Balance of Representation Activities.

The Balance of Representation process included three main components: training, independent rating based on training and professional knowledge, and reaching consensus on ratings. See **Appendix B** for complete agendas.

The **training** consisted of focused readings in national standards documents and discussions to establish clarity about the meaning and intent of the content standards and performance indicators in Maine's *Learning Results*. In this way, national standards documents served as an authoritative, external reference to inform participants' judgments.

The **independent rating** employed a series of scales quantifying the scope and importance of the standards. May 6 was devoted to rating the content standards of Maine's *Learning Results* and May 17 focused on performance indicators. In each case, scope (how "big" is the standard and the content/concept it identifies?) was defined by amount of time necessary to teach it and the frequency of its application in continued study of the discipline. Importance (how significant is the content/concept identified?) was defined by centrality (are other concepts and skills dependent on it?) or correspondence to the important themes of the discipline. Some disciplines, notably mathematics, are hierarchical in their structure and include central concepts. Others, like science and social studies, are thematic, based on big ideas that run through the subject matter. Importance was also rated as a function of correspondence to national standards for the discipline. See **Appendix C** for copies of the rating scales.

Reaching consensus on ratings was accomplished through facilitated discussion supported by specific references to national standards, curriculum, instruction, and developmental theory. Table leaders, discipline specialists from the Department of Education and the Maine Mathematics and Science Alliance, led conversations that resulted in agreed upon ratings representing the groups' best thinking.

The consensus ratings were used to determine relative weightings for content standards and performance indicators. This was accomplished by dividing the total of the consensus ratings for a particular performance indicator by the total of the ratings for all of the performance indicators within the content standard. For example, given a content standard with 5 performance indicators, the 1st indicator

is rated 6 for scope, 2 for importance, and 2 for correspondence to national standards. This results in an overall rating of 10 for that indicator. The remaining indicators received total ratings of 6, 4, 12, and 8 and the total for the five indicators is 40. Thus the 1st indicator is calculated as 10/40 or .25.

Weighting and Final Review procedures took place after the May meetings. These included reviews by Maine's Content Advisory Panels (CAPs). One of these sessions included an opportunity to weight ratings, giving more emphasis to scope than importance, or vice versa. These weighting decisions were made within the context of specific guidelines and were applied across the disciplines that chose to employ them. Throughout the review process, potential problems and concerns were identified and addressed. The resulting ratings were reviewed by Maine's Comprehensive Assessment System Technical Advisory Committee at their December 2002 meeting.

OUTCOMES of Balance of Representation & GUIDANCE for their use

The Balance of Representation process resulted in a complete set of ratings, establishing relative weightings for performance indicators, content standards, and content standard clusters for each of the Learning Results' eight disciplines. The performance indicator ratings, in particular, will be used to design and evaluate Local Assessment Systems (unless a local district chooses to establish a different prioritization using the procedure described in *Measured Measures* or another method). See Appendix D for performance indicator ratings, organized in alphabetical order by discipline and by grade span PK-2, 3-4, 5-8, and 9-12.

When using Balance of Representation results to make distribution decisions for the Local Assessment System consider the following: the performance indicator with the highest rating (expressed in %) must be considered the highest priority for assessment, however, other indicators with similar ratings may be statistically comparable. In order to account for this, use one of the following rules to determine the indicator(s) of the greatest relative scope and importance within a content standard.

1. Divide 50 by the number of performance indicators for a standard at a grade span. The resulting number indicates the percent difference that would be considered meaningful, and takes into account the varying number of indicators for different content standards. For example, when considering a content standard with 4 indicators, a difference of 12.5 % (50/4) is meaningful; for a content standard with 10 indicators, a difference of 5% (10/5) is meaningful.

In order to assist local districts, this analysis has been completed. The ratings in Appendix D are annotated to indicate performance Maine's Balance of Representation: Information and Results October 2003

indicators with relatively low (noted with an *) or relatively high (noted with a +) scope and importance. Where there is no meaningful difference among the performance indicators, there is no annotation. The analysis and annotations are intended to inform local decisions about sampling performance indicators and do not represent a requirement.

Number of Performance Indicator	Meaningful Difference
2	25%
3	16%
4	13%
5	10%
6	8%
7	7%
8 or 9	6%
10 or 11	5%
12, 13, or 14	4%
15	3%

2. Another, more straightforward rule of thumb is to consider a difference of more than 10% meaningful, across the board.

OTHER SUGGESTED USES for Balance of Representation Data

Balance of Representation data at the performance indicator, content standard, and content cluster level should be helpful in informing curriculum, instruction, and assessment. The relative weightings create a diagram of the discipline, noting major features and more minor aspects. This "picture" offers an opportunity to reflect on programs and pedagogy.

Table of Contents for APPENDICES

A 10	Balance of Representation Participant Lists	pp 6-	
B 16	Agendas for Balance of Representation Sessions		
C 18	Rating Scales Used for Establishing Balance of Representation	pp 17-	
D	Performance Indicator Ratings by Discipline		
22	Career Preparation	pp 19-	
29	English Language Arts	pp 23-	
36	Health and Physical Education	pp 30-	
40	Mathematics	pp 37-	
4 0 46	Modern and Classical Languages	pp 41-	
4 0 54	Science and Technology	pp 47-	
	Social Studies	pp 55-	
62 66	Visual and Performing Arts	pp 63-	
E	Graphic Representation of Content Standard Weightings by Discip	oline	
75	Career Preparation English Language Arts Health and Physical Education Mathematics Modern and Classical Languages Science and Technology Social Studies	pg 68 pg 69 pg 70 pg 71 pp 72 pg 73 pg 74-	
13	Visual and Performing Arts	pg 76	

Appendix A: Balance of Representation Participant Lists by Content Area

Career Preparation

Gayla LaBreck Winslow Superintendent's Office John Cook Lewiston Regional Technical Center Cynthia Harris Bath Regional Vocational Center Jeff Johnson North Hampden Hampden Academy Lynn McNeal Caribou Caribou Regional Applied Technology Center Belgrade Central School Marci Billings Belgrade Lora Downing Oakland Maine Department of Education **Shannon Greaney** Brewer Brewer Middle School Tracy Harkins Lewiston KIDS Consortium Farmingdale Thomas Hart Jobs for Maine's Graduates Inc. Marie Hope Lincoln North Penobscot Applied Technology Waldoboro Medomak Valley High School Madelyn Litz Jann Minzy Nobleboro Nobleboro Central School Dave Perron Jobs for Maine's Graduates Inc. Farmingdale Ginny Van Dyke Lewiston Lewiston Regional Technical Center Gary Vines Portland Deering High School

English Language Arts

	(, ,		
Deb Collenburg	Brewer	Pendleton Street School		Prek-2
Audrey Danforth	Topsham	Woodside Elementary Scho	ol	Prek-2
Ann Hurd	Manchester	Manchester Elementary Sch	nool	Prek-2
Janet Metcalf	Orono	Asa Adams School		Prek-2
Dawn Moore	North Hampden	McGraw Elementary. School	l	Prek-2
Mary Lou Shuster	Hollis	Hollis Elementary. School		Prek-2
Lou Willey	Caribou	Hilltop Elementary. School		Prek-2
Candace Crane	Millinocket	Millinocket School Departme	nt	3-4
Megan Grace	Benton	Benton Elementary		3-4
Shelly Johnson	Orono	Asa Adams School		3-4
Joellen Merry	Houlton	Houlton Southside School		3-4
Rhonda Poliquin	Lovell	New Suncook School		3-4
Amy Reif	Brewer	Washington Street School		3-4
Tom Burby	Brewer	Brewer Middle School		5-8
Erica Farrar	Winterport	Wagner Middle School		5-8
Elaine Hendrickson	Presque Isle	Skyway Middle School.		5-8
Sarah Simmonds	Cape Elizabeth	Cape Elizabeth School		5-8
Betsy Anastasoff	Lewiston	Lewiston High School		9-12
John Brassil	Topsham	Mt. Ararat High School		9-12
Anita Findlen	North Hampden	Hampden Academy		9-12
Lucy Girodet	Brewer	Brewer High School		9-12
Betty Pelletier	Fort Kent Fort Ker	nt Community High School	9-12	
Shirely Spaulding	Sanford	Sanford High School		9-12
Joan Spayer	Hamden	Hamden Academy		9-12

Health & Physical Education

Sharon Baker	Winterport	Smith Elementary.	Prek-2
Sharon Beaudoin	Turner	Turner Primary School	Prek-2
Sue Ferguson	Sabattus	Sabattus Elementary	Prek-2
Barbara Jean Jordan	Topsham	Williams-Cone Elementary	Prek-2
Linda MacDonald	Millinocket	Granite Street School	Prek-2
Pat McCabe	Brunswick	Longfellow/Coffin Elementary Schools	Prek-2
Sue Niles	Pittsfield	Vickery School	Prek-2

Health & Physical Education, continued

Sharon Beaudion	Turner	Turner Primary School	PreK-2
Sue Ferguson	Sabattus	Sabattus Elementary	PreK-2
Barbara Jean Jordan	Topsham	William S. Cohen School	PreK-2
Linda MacDonald	Millinocket	Granite Street School	PreK-2
Pat McCabe	Brunswick	Longfellow/Coffin Elementary Schools	PreK-2
Sue Niles	Pittsfield	Vickery School	PreK-2
Rose Prest-Morrison	Hiram	South Hiram Elementary	Prek-2
Nancy Wright	Houlton	Wellington Elementary	Prek-2
Sharry Blais	Gouldsboro	Gouldsboro Grammar School	3-4
David Eldridge	Springvale	Carl J Lamb School	3-4
Paulette Gilbert	Pemaguid	Bristol Consolidated	3-4
Kristin Grant	Windham	Manchester School	3-4
Mark Kellis	Sanford	Line Elementary School	3-4
Kelly Niles	Springvale	Carl J Lamb	3-4
Anne Printup	Poland	Poland Community School	3-4
Marge Robbins	Palermo	Palermo Consolidated School	3-4
Renita Ward	North Hampton	G. B. Weatherbee Elementary	3-4
Connie Wood	Sacopee Valley	South Hiram Elementary	3-4
Rose Angell	Jefferson	Jefferson Village School	5-8
Scott Colby	Oakland	Ralph M Atwood School	5-8
Linda Cote	Yarmouth	Harrison Middle School	5-8
Donald Gray	Topsham	Mt. Ararat High School	5-8
Kathy Kerr	Farmington	Mt. Blue Middle School	5-8
Maureen Lamb	Nobleboro	Nobleboro Central School	5-8
Peter LeVasseur	Sanford	Willard School.	5-8
Sue Lewis	Union 74	Great Salt Bay School	5-8
Tim Pearson	East Holden	Dedham School	5-8
Dave Wilbur	Union 74	Great Salt Bay School	5-8
Diane Batty	Orono	Orono High School	9-12
Susan Boyce	Gray	Gray-New Gloucester High School	9-12
Cindy Breau	Fairfield	Lawrence High School	9-12
Janet Crowe	Freeport	Freeport High School	9-12
Lee Gaudette	Buckfield	Buckfield High School	9-12
Connie Hallet	Portland	Deering High School	9-12
Heidi McGinnis	Presque Isle	Presque Isle High School	9-12
Nate Rende	Boothbay Harbor	Boothbay High School	9-12
Dorothy Whalen	Brewer	Brewer High School	9-12
Lea Bryant		University of Maine at Farmington	

Mathematics

Denise Stearns	Heffernan	Old Orchard Beach	Jameson Elementary. School.	Prek-2
Diane Knott		Gorham	Narragansett Elementary. School	Prek-2
Tina McGowan		Sullivan	Mountain View School	Prek-2
Margie Rogers		Orono	Asa C Adams School	Prek-2
Kimberly Falco	ne Schroeter	Portland	Maine Mathematics &Science Alliance	Prek-2
Howie Tuttle		Topsham	Woodside Elementary. School.	Prek-2
Sue Ann Craig		Brewer	Washington Street School	3-4
Terry Dupont		Millinocket	Granite Street School	3-4
Laura Gabriel		Jefferson	Jefferson Village School	3-4
Cynthia Hillmar	n-Forbush	Houlton	Maine Mathematics & Science Alliance	3-4
Diane MacGreg	gor	Readfield	Readfield Elementary. School	3-4
Cindy Scappati	cci	Liberty	Walker Memorial School	3-4
Heidi Thurston		Orono	Asa C Adams School	3-4
Zhiujuin Wu		Presque Isle	University of Maine at Presqe Isle	3-4
Elizabeth Bradl	ey	Lewiston	Lewiston High School	5-8
Barbara Caron		Fort Kent	Fort Kent Community High School	5-8
Daniel Chapma	an	Orono	Orono Middle School	5-8
Monique Culbe	rtson	Scarborough	Scarborough School Department	5-8
Eleanor Merricl	<	Sanford	Edison School	5-8
Larry Reese		Brunswick	Brunswick Junior High School	5-8
Cheryl Rose		Augusta	Maine Mathematics & Science Alliance	5-8
Grace Scarano	1	Scarborough	University of New England	5-8
Vern Voter		Phillips	Phillips Middle School	5-8
Brenda Willis		Brewer	Brewer Middle School	5-8
David Bowie		Lewiston	Lewiston High School	9-12
Michael Clark		Brewer	Brewer High School	9-12

Bob Franzosa	Orono	University of Maine	9-12
Mathematics, cont	inued		
Lauralee Lynch	North Hampden	Hampden Academy	9-12
Karen Mayhew	Thorndike	Mt. View High School	9-12
Brian Twitchell	Strong	Mt. Abram Regional High School	9-12
Ed Driscoll	Biddeford	Biddeford Regional Center of Technological	gy

Modern & Classical Languages

Charles Hicks Charles	Windham	Manchester School	Prek-4
Cindy Albert	Caribou	Hilltop School	Prek-4
Sylvie Charron	Farmington	University of Maine at Farmington	Prek-4
Carol Cupples	Kingfield	Kingfield/Stratton Elementary Schools	Prek-4
Catherine Hobby	Falmouth	D W Lunt School	Prek-4
Ann Marie Martin	Soldier Pond	Wallgrass Elementary School	Prek-4
Lynda Millar	Northeast Harbor	Mt. Desert Island Elementary School	Prek-4
Jeanne Disciullo-Carpenter	Yarmouth	Frank Harrison Middle School	3-4
Michael Courchesne	Lewiston	Lewiston Middle School	5-8
Mary Grady-Hebert	Elliot	Marshwood Jr. High	5-8
Gretchen Livingston	Farmingdale	Hall-Dale Middle School	5-8
Mary Lord	Brunswick	Brunswick Jr. High School	5-8
Marilee Osier	Hiram	Sacopee Valley High School	5-8
Brandee Savage	. Lubec	Lubec Consolidated School	5-8
Wendy Tanahashi	Bath	Bath Middle School	5-8
Christine Crocker	Orono	Orono High School	9-12
Bernard Fortier	Lewiston	Lewiston High School	9-12
Daniel Gray	Islesboro	Islesboro Central School	9-12
Karen Larson	Old Town	Old Town High School	9-12
Jane Lienau	Brunswick	Brunswick High School	9-12
Claudette O'Connell	Brewer	Brewer High School	9-12
Kathleen Prins	Augusta	Cony High School	9-12
Lourdes Rodriguez Von Vogt	Newcastle	Lincoln Academy	9-12
Lousie Wieland	Rockland	Rockland District High School	9-12
T.W. Williamson	Falmouth	Falmouth High School	9-12
Kathy Yates	Sabattus	Oak Hill High School	9-12
Patricia Mullis	Newport	Nokomis Regional High School	9-12
Peter Nutting	Thorndike	Mount View High School	9-12

Science and Technology

ooioiioo aiia i ooi			
Nancy Chesley	Cumberland Cent	er Mabel I. Wilson School	Prek-2
Cynthia Fletcher	North Hampden	McGraw Elementary School	Prek-2
Roxanne Malloy	Gouldsboro	Gouldsboro Grammar School	Prek-2
Heather Nelson	Brewer	Pendleton St. School	Prek-2
Jancie Poulin-Whitney	Machias	Rose M Gaffney School	Prek-2
Krystal Ash O'Sullivan	Scarborough	Wentworth Inter. School	3-4
Elizabeth Byers-Small	Mattawamkeag	Dr. Carl Troutt School	3-4
Arlene Celler	Gray	Russell Elementary School	3-4
Linda Kuzyk	Bethel	Crescent Park School	3-4
Cynthia Langdon	Berwick	Noble VI Grade School	3-4
Chris Mara	Jefferson	Jefferson Village School	3-4
June Rose	Sanford	Willard School	3-4
Denise Churchill	Readfield	Maranacook Middle School	5-8
Lynn Farrin	Jefferson	Jefferson Village School	5-8
Kym Granger	Topsham	Mt. Ararat Middle School	5-8
Frank Page	Brewer	Brewer Middle School	5-8
David Crockett	Poland	Poland Regional High School	9-12
Lisa Damian-Marvin	Thomaston	Georges Valley High School	9-12
Irene Murphy	Fort Kent	Fort Kent Community High School	9-12
Marguerite Murphy	Thomaston	Georges Valley High School	9-12
Barbara O'Neil	Brunswick	Mt. Ararat High School	9-12
Dianne Porter	Belfast	Belfast Area High School	9-12
Pamela Proulx-Curry	Unity	Unity College	9-12
Brad Veitch	North Hampden	Hampden Academy	9-12

Social Studies

		200101 2001010	
Jen Becker	Brewer	Pendleton St. School	Prek-2
Phyllis Cote	Springvale	Carl J Lamb School	Prek-2
CheryCrockett I	Brunswick	Jordan Acres School	Prek-2
Pat Richard	Fort Kent	Fort Kent Elementary School	Prek-2
Patti Scully	Palermo	Palermo Consolidated School	Prek-2
Sue Tiner	Lewiston	Montello School	Prek-2
Gail Anderson	Brunswick	Longfellow Elementary School	3-4
Ann Asbeck	Orono	University of Maine	3-4
Stacy DelGallo	Chelsea	Chelsea School	3-4
Debbie Dupont	Millinocket	Granite Street School	3-4
Jan Snow	Blue Hill	Blue Hill Consolidated School	3-4
Victoria Burns	Gray	Office of the Superintendent	5-8
Tim Collins	Bethel	Telstar Middle School	5-8
Betty Morrell	Readfield	Readfield Elementary School	5-8
Nancy Perkins	Buxton	Bonny Eagle Middle School	5-8
Kathy Schoolwigan	Brewer	Brewer Middle School	5-8
Brian Cushing	Naples	Lake Region High School	9-12
Jason Dorr	North Hampden	Hampden Academy	9-12
Jim Gallagher	Sanford	Sanford High School	9-12
Liam Riordan	Orono	University of Maine	9-12
Tim Thornton	Brewer	Brewer High School	9-12
Faith Vatour	Rockport	Camden Hills Regional High School	9-12
Jana Boody	Waterboro	MSAD #57	9-12

Visual & Performing Arts Westbrook Saccarappa School

Karen Maxell	Westbrook	Saccarappa School	Prek-4
Ruth McAtee	Mapleton	Mapleton Elementary School	Pre -4
Lucy Rioux	Gardiner	Carrie Ricker Middle School	Prek-4
Jan Smith	Orono	Asa C Adams School	Prek-4
Jane Snider	Harrington	MSAD 37	Prek-4
Trudy Wilson	Gorham	Uiniversity of Southern Maine	Prek-2
Rosemary Cunningham	Pownal	Pownal Elementary/Phippsburg Eleme	ntary Prek-2
Faye Anderson	Newburgh	Newburgh Elementary	3-4
Karen Hartnagel	Bangor	Community Health & Counseling Servi	ces 3-4
Joseph Farrell	Portland	King Middle School	5-8
Sandy Griswold	Harrington	MSAD #77	5-8
Kelly Willy	Bucksport	G. H. Jewett School	5-8
Lynda McCann-Olson	Yarmouth	North Yarmouth Memorial School	5-8
Diana Mosher	Pownal	Pownal Elementary School	5-8
Nancy Sanchez	Portland	Lincoln Middle School	5-8
MaryEllen Schoolaper	Hollis	MSAD #6	5-8
Debra Susi	Pittsfield	Warsaw Middle School	5-8
Sally Bean	Strong	Mt Abram Regional High School	9-12
Douglas Clapp	Fort Kent	Fort Kent Community High School	9-12
Joan Hamann	Turner	Leavitt Area High School	9-12
Timothy Kavanagh	Bethel	Telstar Regional Middle/High School	9-12
Vaughn McLaughlin	Caribou	Caribou School Department	9-12
Beth Ann Miller	Mapleton	Pine Street Elementary	
Sarah Sutter	Wiscasset	Wiscasset High School	9-12
Scott Trach	Portland	Portland Public Schools	9-12
Virginia White	Caribou	Caribou High School	9-12
Larry Williams	Poland	Poland Regional High School	9-12

Observers, Facilitators, & Presenters Maine Department of Education

J. Duke Albanese	Maine Department of Education.
Christine Anderson Morehouse	Maine Mathematics and Science Alliance
Marge Petit	National Center for Improving Educational Assessment
Melanie Bachinski	Maine Department of Education
Mona Baker	Maine Department of Education
Annette Brann	Maine Department of Education
David Cadigan	Maine Department of Education
Marsha Cottrell	Maine Department of Education
Diana Doiron	Maine Department of Education

Lora Downing Maine Department of Education
Francis Eberle Maine Mathematics and Science Alliance

Observers, Facilitators, & Presenters, continued

Denice Hatch
Dan Hupp
Maine Department of Education
Mancy Lamontagne
Maine Department of Education

Henrietta List Maine Mathematics and Science Alliance Judy Lucarelli Maine Department of Education Maine Department of Education Connie Manter Gail Mazzaro Maine Department of Education Wanda Monthey Maine Department of Education Grace Morgan Maine Department of Education Linda Parkin Maine Department of Education Bill Primmerman Maine Department of Education Don Reutershan Maine Department of Education

Pam Rolfe Maine Department of Education
Jill Rosenblum Maine Mathematics and Science Alliance

Estelle Sanders

Maine Department of Education
Susan Smith

Maine Department of Education
Maine Department of Education
Maine Department of Education
Stephanie Swan

Maine Department of Education

Dr. Norman Webb Wisconsin Center. for Education Research

Kathy Wilbur Maine Department of Education
Susan Wishkoski Maine Department of Education

Appendix B <u>Agendas for Balance of Representation</u> <u>Sessions</u>

Balance of Representation Agenda May, 2002

May 6, 2002

9:00 Welcome and Introductions

Opening Remarks
Commissioner of Education J. Duke Albanese

Keynote Speaker

Dr. Norman L. Webb Achieving Balance through
Weighing the Importance of
Content

10:00-12:00 DISCIPLINE BREAKOUTS

Introductions
Overview of Process
Review of Ground Rules

Discipline Reading
Debrief in large discipline group
Documentation of common understanding &
agreement
Grade Span Reading

12:00-1:00 LUNCH

1:00-4:00 Document common understandings Report out K-12

INTRODUCE RATING PROCEDURE

Complete rating of Content Standards for the discipline

4:00 CLOSING

Draft Balance of Representation Agenda MAY 17, 2002

Report out of May 6th finalized results – point values?

Discipline Groups broken in subdiscipline groups assigned one or more content standards

Process of content clarification - detailed readings, notes, and debrief

Ratings for individual performance indicators based on **scope** and **importance**

Proportions figured mathematically

May 6th Evening Process

5 pm Dinner (buffet until 6)

6 pm Evening work begins

Guidance for evening work – Pam Rolfe

- Review the day's data for patterns in grade spans and K-12
 - What do you see? Does it confirm current thinking?
 - What surprises you?
 - What recommendations will you make to keep or change any ratings?
- Compare to national data if available
- Discuss "To do's and don'ts" for May 17 based on the "chunky agenda" of

May 17, 2002

Report out of May 6th finalized results – point values?

Discipline Groups broken in subdiscipline groups assigned one or more content standards

Process of content clarification - detailed readings, notes, and debrief

Ratings for individual performance indicators based on **scope** and **importance** Proportions figured mathematically

Gather thoughts on readings for process with performance indicators

< 8 pm Adjourn with profuse thanks

Balance of Representation Schedule and Process May 17, 2002

8:00-8:45	Table Leader Training (Mona Baker)
8:30-9:00	REGISTRATION
9:00- 9:30	Welcome Review of May 6 th Status Opening Remarks- Dr. Judith Lucarelli Deputy Commissioner of Education Review purpose, mention L.R revision process Emphasize role of external standards
	Review rooms assignments etc.
9:30- 9:45	BREAK AND REGROUP BY DISCIPLINES
9:45-10:00	DISCIPLINE BREAKOUTS
	(Room Leader) Introductions in group Review agenda / purpose Review Ground Rules (revised for 5/17) Revisit and summarize findings and ideas from May 6 th
10:30- 10:45	ASSIGN CONTENT RESPONSIBILITIES (based on OPTION SELECTION) Review READINGS - Purpose and Process (read, take notes, discuss, consensus)
10:45-11:45	Reading
11:45-12:45	LUNCH
12:45- 1:30	Debrief / Reach Consensus on Reading
1:30-1:45	Review (GIVE EXAMPLES) rating procedure Be prepared to differentiate between and among
1:45-2:45	Complete Rating
2:30-2:45	BREAK

2:45-3:50 REPORT OUT IN GROUPS

(content standard K-12 subgroup or grade span

- depends on the option you chose)
 - Report rating
 - Allow for general affirmation or confirmation and objections
 - Respond to objections with evidence
 - Discuss as necessary
 - After 5 minutes- record rating with * notes

3:50-4:00 Closing

Thanks

Explain timeline and next steps (again)

Balance of Representation Institute

DATA REVIEW SESSION June 3, 2002

9:00-9:50-	Discipline Specialists Meeting Final Review of day's agenda Training on Excel data program
10:00-10:20	All Disciplines Welcome/ Opening Remarks Review purpose of meeting Explain overall timeline for this work
10:20-12:00	Discipline Breakouts (Room Leader) Explain Considerations for Review of Data Review data from May 17 th Aggregate data from May 17 th by content standard and compare to May 6 th data Revisit data where discrepancies exist and recalculate
12:00-1:00	Lunch
1:00- 1:15 1:15-	Introduce procedure for final review of the data and the completing of draft recommendations to Department of Education (Discipline Specialist) Complete review of data and
4.00	draft recommendations
4:00	Closing

Appendix C

Rating Scales Used for Establishing Balance of Representation

Rating Scales for Performance Indicators

Scope of Performance Indicators at a grade span

• •	Coope of Ferromance maleatore at a grade opan
	(weighting x _)
	Consider the amount of time where the concepts/skills described in the
	indicator would be the focus of direct instruction and rate according to
	the following scale:

Indicator would be taught in a matter of hours = 1
Indicator would be taught in a matter of days =2
Indicator would be taught in a matter of weeks = 3
Indicator would be taught in a matter of months = 4
Indicator would be taught over more than year = 5

Consider the frequency with which you would expect students to apply the concepts/skills described in the indicator, after the completion of direct instruction activities, and rate according to the following scale:

> Indicator is applied over days = 1 Indicator is applied over weeks = 2 Indicator is applied over months = 3 Indicator is applied over years = 4

 Importance of performance indicators at a grade span (weighting X _____)
 Consider the extent to which each indicator reflects the important

Consider the extent to which each indicator reflects the important concepts and themes of your discipline, as described in national standards and rate according to the following scale:

Indicator does not address an important theme described in national standards = 1
Indicator addresses an important theme described in national standards but in an indirect or peripheral way = 2
Indicator directly addresses an important theme described in national standards = 3
Indicator directly addresses more than one important theme described in national standards = 4

OR

Consider the extent to which each indicator addresses the concepts and skills that represent the core/central ideas of your discipline and rate according to the following scale:

Indicator is completely dependent on other concepts and skills as described in national standards = 1 Indicator is, in some ways, dependent on other concepts and skills as described in national standards = 2 Indicator represents a central concept as described in national standards = 3

3. Correspondence to National Standards (weighting X _____)

Consider the extent to which the concepts and skills described in the performance indicator are reflected in national standards for the discipline:

There is no correspondence between the indicator and the national standards = 1

The concepts/skills of the indicator are addressed in national standards but not as a specified outcome (performance indicator) = 2

The indicator is in both the *Learning Results* and the national documents with differing levels of depth and complexity (or at a different grade level). = 3

The indicator is in both the *Learning Results* and the national documents with the same level of depth and complexity. = 4

Appendix D Performance Indicator Ratings by Discipline

Career Preparation - Grades PK-2

	Weight →	1	5	10	10			
		Scope					% of	
	Perf. Ind.	1	Scope 2	Import	Corresp	Sum	Total	% Std
A. Preparing for the Future	1	5	4	3	4	95	9.50%	26%
36.70%	2	5	4	3	4	95	9.50%	26%
	3	2	4	2	4	82	8.20%	22%

	4	5	4	3	4	95	9.50%	26%
B. Education/Career Planning and								
Management	1	2	3	2	3	67	6.70%	* 32%
20.90%	2	2	1	1	3	47	4.70%	* 22%
	3	5	4	3	4	95	9.50%	+ 45%
C. Integrated and Applied Learning	1	1	1	2	3	56	5.60%	30%
18.80%	2	2	1	2	2	47	4.70%	* 25%
	3	5	4	3	3	85	8.50%	+ 45%
D. Balancing Responsibilities	1	5	4	3	4	95	9.50%	+ 40%
23.60%	2	1	3	2	2	56	5.60%	* 24%
	3	5	4	3	3	85	8.50%	36%
Total						1000	100.00%	

Scope 1 is the amount of time where the concept/skills would be the focus of direct instruction.

Scope 2 is the frequency with which students would apply the concepts/skills after direct instruction.

Import is the importance of indicator at the grade span.

^{*} significantly low percentage performance indicator

⁺ significantly high percentage performance indicator

Career Preparation - Grades 3-4

Weight →	1	5	10	10			
<u> </u>	Scope					% of	
Perf. Ind.	1	Scope 2	Import	Corresp	Sum	Total	% Std
1	5	4	3	4	95	9.61%	+ 24%
2	5	4	3	4	95	9.61%	+ 24%
3	3	2	2	2	53	5.36%	* 13%
4	2	4	2	2	62	6.27%	16%
5	5	4	3	4	95	9.61%	+ 24%
1	2	1	2	1	67	<i>(</i> 770/	210/
							31%
		1			67		31%
3	5	4	3	3	85	8.59%	39%
1	1	2	2	1	41	4.15%	31%
2	1	1	2	2	46	4.65%	34%
3	2	1	2	2	47	4.75%	35%
1	5	4	3	4	95	9.61%	+ 40%
2	5	4	3	4	95	9.61%	+ 40%
3	1	1	2	2	46	4.65%	* 19%
					080	100 000/	
	1 2 3 4 5 1 2 3 1 2 3	Perf. Ind. 1	Perf. Ind. Scope 1 Scope 2 1 5 4 2 5 4 3 3 2 4 2 4 5 5 4 1 2 1 2 2 1 3 5 4 2 1 1 2 1 1 3 2 1 1 5 4 2 5 4	Perf. Ind. Scope 1 Scope 2 Import 1 5 4 3 2 5 4 3 3 3 2 2 4 2 4 2 5 5 4 3 1 2 1 2 2 2 1 3 3 5 4 3 1 1 2 2 2 1 1 2 3 2 1 2 2 1 1 2 3 2 1 2 4 3 2 1 2 3 4 3 3 3 3	Perf. Ind. Scope 1 Scope 2 Import Corresp 1 5 4 3 4 2 5 4 3 4 3 3 2 2 2 4 2 4 2 2 5 5 4 3 4 2 2 1 3 3 3 5 4 3 3 1 1 2 2 1 2 1 1 2 2 3 2 1 2 2 3 2 1 2 2 3 2 1 2 2 3 2 1 2 2 3 4 3 4	Perf. Ind. Scope 1 Scope 2 Import Corresp Sum 1 5 4 3 4 95 2 5 4 3 4 95 3 3 2 2 2 53 4 2 4 2 2 62 5 5 4 3 4 95 1 2 1 2 4 67 2 2 1 3 3 67 3 5 4 3 3 85 1 1 2 2 1 41 2 1 1 2 2 4 3 2 1 2 2 4 4 3 2 2 4 4 4 3 4 95 4 3 4 95 4 3 4 3 4<	Perf. Ind. Scope 1 Import Corresp Sum Total 1 5 4 3 4 95 9.61% 2 5 4 3 4 95 9.61% 3 3 2 2 2 53 5.36% 4 2 4 2 2 62 6.27% 5 5 4 3 4 95 9.61% 1 2 1 2 4 67 6.77% 2 2 1 3 3 67 6.77% 3 5 4 3 3 85 8.59% 1 1 2 2 1 4 4.15% 2 1 1 2 2 4 4.65% 3 2 1 2 2 4 4.65% 4 3 4 95 9.61% 2

Changed from 1 to 2: based on current classroom teaching practices, the frequency of application is actually greater than previously indicated, e.g., Maine Studies. Change has been made in spreadsheet.

Scope 1 is the amount of time where the concept/skills would be the focus of direct instruction.

Scope 2 is the frequency with which students would apply the concepts/skills after direct instruction.

Import is the importance of indicator at the grade span.

^{*} significantly low percentage performance indicator

⁺ significantly high percentage performance indicator

Career Preparation - Grades 5-8

	Weight →	1	5	5	5			
		Scope					% of	
	Perf. Ind.	1	Scope 2	Import	Corresp	Sum	Total	% Std
A. Preparing for the Future	1	2	3	3	4	87	8.07%	+ 28%
28.48%	2	4	4	3	4	94	8.72%	+ 31%
	3	3	2	1	2	43	3.99%	* 14%
	4	3	2	3	4	83	7.70%	+ 27%
B. Education/Career Planning and								
Management	1	4	4	3	3	84	7.79%	39%
20.22%	2	2	3	2	3	67	6.22%	31%
	3	2	3	2	3	67	6.22%	31%
C. Integrated and Applied Learning	1	2	2	1	2	42	3.90%	* 25%
15.58%	2	2	2	1	2	42	3.90%	* 25%
	3	4	4	3	3	84	7.79%	+ 50%
D. Balancing Responsibilities	1	3	3	3	3	78	7.24%	20%
35.71%	2	2	2	2	3	62	5.75%	16%
	3	3	3	3	3	78	7.24%	20%
	4	4	4	3	3	84	7.79%	22%
	5	3	4	3	3	83	7.70%	22%
						1070	100.000/	
Total						1078	100.00%	

Scope 1 is the amount of time where the concept/skills would be the focus of direct instruction.

Scope 2 is the frequency with which students would apply the concepts/skills after direct instruction.

Import is the importance of indicator at the grade span.

^{*} significantly low percentage performance indicator

⁺ significantly high percentage performance indicator

Career Preparation - Grades 9-12

	Weight →	1	5	5	10			
	Perf.	Scope					% of	
	Ind.	1	Scope 2	Import	Corresp	Sum	Total	% Std
A. Preparing for the Future	1	3	4	3	4	93	8.03%	+ 32%
24.96%	2	2	4	3	3	82	7.08%	+ 28%
	3	2	4	3	3	82	7.08%	+ 28%
	4	2	2	1	1	32	2.76%	* 11%
B. Education/Career Planning and								
Management	1	3	4	3	4	93	8.03%	+ 30%
26.68%	2	2	4	3	3	82	7.08%	27%
	3	2	4	3	3	82	7.08%	27%
	4	2	2	2	2	52	4.49%	* 17%
C. Integrated and Applied Learning	1	3	2	3	3	73	6.30%	25%
24.78%	2	2	2	2	2	52	4.49%	18%
	3	2	1	2	2	47	4.06%	16%
	4	3	2	2	3	63	5.44%	22%
	5	2	2	2	2	52	4.49%	18%
D. Balancing Responsibilities	1	2	2	2	3	62	5.35%	23%
23.58%	2	2	3	2	3	67	5.79%	25%
25.5073	3	2	3	3	3	77	6.65%	28%
	4	2	3	2	3	67	5.79%	25%
Total						1158	100.00%	

Changed from 4 to 3: because we don't use knowledge and theories of growth and development or assess them often enough to rate a 4. Note: de-emphasize theories of growth and development.

Scope 1 is the amount of time where the concept/skills would be the focus of direct instruction.

Scope 2 is the frequency with which students would apply the concepts/skills after direct instruction.

Import is the importance of indicator at the grade span.

- * significantly low percentage performance indicator
- + significantly high percentage performance indicator

English Language Arts - Grades PK-2

	Weight →	3	7	10	1			
	Perf. Ind.	Scope 1	Scope 2	Import	Corresp	Sum	% of Total	% Std
A. Process of Reading	1	5	4	3	4	77	5.07%	17%
30.70%	2	4	4	3	3	73	4.81%	16%
	3	3	4	2	2	59	3.89%	13%
	4	2	4	2	2	56	3.69%	12%
	5	5	4	2	3	66	4.35%	14%
	6	5	4	3	3	76	5.01%	16%
	7	3	4	2	2	59	3.89%	13%
B. Literature and Culture	1	2	4	2	3	57	3.75%	25%
14.89%	2	3	4	2	2	59	3.89%	26%
	3	5	4	2	4	67	4.41%	30%
	4	1	4	1	2	43	2.83%	19%
C. Languages and Images	1	5	4	2	4	67	4.41%	36%
12.12%	2	5	4	2	4	67	4.41%	36%
	3	3	4	1	3	50	3.29%	27%
D. Informational Texts	1	2	4	2	3	57	3.75%	100%
3.75%								
E. Process of Writing and Speaking	1	5	4	3	4	77	5.07%	33%
15.22%	2	5	4	3	4	77	5.07%	33%
	3	5	4	3	4	77	5.07%	33%
F. Standard English Conventions	1	5	4	2	3	66	4.35%	52%
8.30%	2	3	4	2	3	60	3.95%	48%
G. Stylistic and Rhetorical Aspects of Writing and Speaking	1	5	4	3	3	76	5.01%	100%
5.01%	1	3	7	3	3	70	3.0170	10070
H. Research Related Writing and Speaking	1	3	4	1	4	51	3.36%	34%
10.01%	2	3	4	1	4	51	3.36%	34%
	3	3	4	1	3	50	3.29%	33%
Total						1518	100.00%	

Scope 1 is the amount of time where the concept/skills would be the focus of direct instruction.

Scope 2 is the frequency with which students would apply the concepts/skills after direct instruction.

Import is the importance of indicator at the grade span.

^{*} significantly low percentage performance indicator

+ significantly high percentage performance indicator

English Language Arts - Grades 3-4

	Weight →	3	7	10	1			
	Perf.		-				% of	
	Ind.	Scope 1	Scope 2	Import	Corresp	Sum	Total	% Std
A. Process of Reading	1	2	4	1	2	46	1.59%	15%
10.42%	2	2	4	2	3	57	1.97%	19%
	3	2	4	2	3	57	1.97%	19%
	4	3	4	3	4	71	2.45%	24%
	5	3	4	3	4	71	2.45%	24%
		_						
B. Literature and Culture	1	1	3	2	3	47	1.62%	* 7%
23.77%	2	3	4	2	3	60	2.07%	9%
	3	2	4	2	2	56	1.93%	8%
	4	2	4	3	3	67	2.31%	10%
	5	3	4	1	2	49	1.69%	* 7%
	6	3	4	2	2	59	2.04%	9%
	7	2	4	3	3	67	2.31%	10%
	8	2	4	1	2	46	1.59%	* 7%
	9	2	4	2	2	56	1.93%	8%
	10	4	4	3	3	73	2.52%	+ 11%
	11	3	4	2	3	60	2.07%	9%
	12	2	3	2	2	49	1.69%	* 7%
	12				2	.,	1.0570	770
C. Languages and Images	1	2	4	2	4	58	2.00%	+ 19%
10.69%	2	2	4	2	4	58	2.00%	+ 19%
10.07/0	3	2	4	2	2	56	1.93%	18%
	4	2	4	2	2	56	1.93%	18%
	5	2	2	1	3	33	1.14%	* 11%
	6	2	3	2	2	49	1.69%	16%
						.,	1.0570	1070
D. Informational Texts	1	2	4	2	2	56	1.93%	14%
14.18%	2	2	4	2	2	56	1.93%	14%
11.10/0	3	4	4	3	3	73	2.52%	+ 18%
	4	3	4	2	2	59	2.04%	14%
	5	2	4	2	2	56	1.93%	14%
	6	2	4	1	2	46	1.59%	* 11%
	7	1	4	3	4	65	2.24%	16%
	<u>'</u>	1	7	3	7	0.5	2.27/0	10/0
E. Process of Writing and Speaking	1	2	4	3	4	68	2.35%	18%
13.07%		3	4	3	3	70	2.41%	18%
15.07/0	3	3	4	3	3	70	2.41%	18%
	4	3	4	2	3	60	2.07%	16%
	5	2	4	2	1	55	1.90%	15%
	6	2	4	2	2	56	1.93%	15%
1	0		4			50	1.7370	1.370
F. Standard English Conventions	1	4	4	2	3	63	2.17%	53%

4.14% 2 2 4 2 3 57 1.97% 48%

English Language Arts - Grades 3-4, continued

	Weight →	3	7	10	1			
	Perf. Ind.	Scope 1	Scope 2	Import	Corresp	Sum	% of Total	% Std
G. Stylistic and Rhetorical		•		•	•			
Aspects of Writing and Speaking	1	3	4	2	3	60	2.07%	14%
	2	3	4	3	2	69	2.38%	+ 17%
14.32%								
	3	4	4	3	2	72	2.48%	+ 17%
	4	2	4	2	4	58	2.00%	14%
	5	2	2	2	3	43	1.48%	* 10%
	6	2	4	2	2	56	1.93%	13%
	7	2	4	2	3	57	1.97%	14%
H. Research Related								
Writing and Speaking	1	1	4	2	4	55	1.90%	20%
9.42%	2	3	4	2	4	61	2.10%	22%
	3	2	4	2	3	57	1.97%	21%
	4	2	4	2	3	57	1.97%	21%
	5	1	4	1	2	43	1.48%	16%
Total						2899	100.00%	

Scope 1 is the amount of time where the concept/skills would be the focus of direct instruction.

Scope 2 is the frequency with which students would apply the concepts/skills after direct instruction.

Import is the importance of indicator at the grade span.

^{*} significantly low percentage performance indicator

⁺ significantly high percentage performance indicator

English Language Arts - Grades 5-8

	Weight →	3	7	10	1			
	Perf.		Scope				% of	
	Ind.	Scope 1	2	Import	Corresp	Sum	Total	% Std
A. Process of Reading	1	2	4	3	4	68	1.95%	10%
20.44%	2	2	4	3	4	68	1.95%	10%
	3	3	3	2	4	54	1.55%	8%
	4	2	4	3	4	68	1.95%	10%
	5	3	4	3	4	71	2.03%	10%
	6	2	4	3	2	66	1.89%	9%
	7	2	4	3	2	66	1.89%	9%
	8	3	4	3	4	71	2.03%	10%
	9	3	4	3	2	69	1.97%	10%
	10	2	4	2	4	58	1.66%	8%
	11	2	4	2	1	55	1.57%	8%
B. Literature and Culture	1	2	3	2	4	51	1.46%	7%
21.41%	2	2	4	3	4	68	1.95%	9%
	3	2	4	1	2	46	1.32%	* 6%
	4	3	4	3	2	69	1.97%	9%
	5	2	2	2	2	42	1.20%	* 6%
	6	3	4	1	2	49	1.40%	7%
	7	3	4	1	2	49	1.40%	7%
	8	5	4	3	4	77	2.20%	+ 10%
	9	3	4	3	4	71	2.03%	9%
	10	2	2	2	3	43	1.23%	* 6%
	11	2	4	2	3	57	1.63%	8%
	12	3	4	3	3	70	2.00%	9%
	13	2	4	2	2	56	1.60%	7%
C. Languages and Images	1	2	4	2	3	57	1.63%	+ 25%
6.50%	2	2	1	1	3	26	0.74%	* 11%
	3	2	4	1	2	46	1.32%	20%
	4	4	4	2	3	63	1.80%	+ 28%
	5	3	2	1	2	35	1.00%	15%
D. Informational Texts	1	2	4	1	2	46	1.32%	12%
10.68%	2	2	4	1	2	46	1.32%	12%
	3	3	4	3	3	70	2.00%	+ 19%
	4	1	2	1	2	29	0.83%	* 8%
	5	3	4	3	2	69	1.97%	+ 18%
	6	2	2	2	3	43	1.23%	12%
	7	1	2	1	1	28	0.80%	* 8%
	8	1	4	1	1	42	1.20%	11%
E. Process of Writing and Speaking	1	3	4	3	4	71	2.03%	37%

	5.44%	2	3	4	3	4	71	2.03%	37%
Ī		3	1	3	2.	4	48	1 37%	25%

English Language Arts - Grades 5-8, continued

	Weight →	3	7	10	1			
	Perf. Ind.	Scope 1	Scope 2	Import	Corresp	Sum	% of Total	% Std
F. Standard English Conventions	1	3	4	3	3	70	2.00%	+ 68%
2.95%	2	2	2	1	3	33	0.94%	* 32%
G. Stylistic and Rhetorical Aspects of Writing and Speaking	1	4	4	3	3	73	2.09%	11%
19.00%	2	4	4	2	2	62	1.77%	9%
	3	3	4	3	4	71	2.03%	11%
	4	3	4	3	3	70	2.00%	11%
	5	4	4	2	2	62	1.77%	9%
	6	3	4	3	4	71	2.03%	11%
	7	4	4	3	2	72	2.06%	11%
	8	3	4	3	4	71	2.03%	11%
	9	2	4	2	2	56	1.60%	8%
	10	2	4	2	2	56	1.60%	8%
H. Research Related Writing and Speaking	1	3	4	3	4	71	2.03%	+ 15%
13.59%	2	2	4	2	3	57	1.63%	+ 12%
	3	2	4	2	2	56	1.60%	+ 12%
	4	2	4	1	2	46	1.32%	10%
	5	1	2	1	2	29	0.83%	* 6%
	6	2	4	2	2	56	1.60%	+ 12%
	7	2	4	2	4	58	1.66%	+ 12%
	8	2	2	1	2	32	0.92%	7%
	9	2	2	2	2	42	1.20%	9%
	10	1	2	1	1	28	0.80%	* 6%
Total						3494	100.00%	

 $[\]textbf{Scope 1} \text{ is the amount of time where the concept/skills would be the focus of direct instruction.} \\$

Scope 2 is the frequency with which students would apply the concepts/skills after direct instruction.

Import is the importance of indicator at the grade span.

^{*} significantly low percentage performance indicator

⁺ significantly high percentage performance indicator

English Language Arts - Grades 9-12

	Weight →	3	7	10	1			
	Perf.	Scope	Scope				% of	
	Ind.	1	2	Import	Corresp	Sum	Total	% Std
A. Process of Reading	1	5	4	3	4	77	1.90%	+ 11%
16.72%	2	2	4	2	3	57	1.41%	8%
	3	2	4	3	3	67	1.65%	10%
	4	3	4	3	2	69	1.70%	10%
	5	3	4	3	2	69	1.70%	10%
	6	3	4	2	3	60	1.48%	9%
	7	1	4	2	1	52	1.28%	8%
	8	1	4	1	1	42	1.04%	* 6%
	9	2	4	3	3	67	1.65%	10%
	10	2	4	3	3	67	1.65%	10%
	11	3	4	1	3	50	1.23%	7%
B. Literature and Culture	1	1	4	3	4	65	1.61%	9%
17.51%	2	2	4	1	3	47	1.16%	7%
	3	2	4	2	4	58	1.43%	8%
	4	2	4	3	2	66	1.63%	9%
	5	2	4	3	2	66	1.63%	9%
	6	4	4	3	2	72	1.78%	10%
	7	5	4	2	4	67	1.65%	9%
	8	5	4	2	4	67	1.65%	9%
	9	2	4	1	3	47	1.16%	7%
	10	5	4	3	4	77	1.90%	11%
	11	5	4	3	4	77	1.90%	11%
	11					, ,	113 0 70	1170
C. Languages and Images	1	3	4	2	3	60	1.48%	13%
11.71%		2	4	2	3	57	1.41%	12%
111/1/0	3	2	4	3	4	68	1.68%	14%
	4	2	4	3	1	65	1.61%	14%
	5	2	4	2	1	55	1.36%	12%
	6	2	4	3	3	67	1.65%	14%
	7	2	4	2	3	57	1.41%	12%
	8	2	4	1	1	45	1.11%	9%
	9			-	-	1.5	1.1170	770
D. Informational Texts	1	1	4	1	2	43	1.06%	13%
8.50%		2	4	3	2	66	1.63%	19%
0.5070	3	2	4	1	3	47	1.16%	14%
	4	2	4	3	3	67	1.65%	19%
	5	2	4	3	4	68	1.68%	20%
	6	1	4	2	2	53	1.31%	15%
	0	1		2	2	23	1.51/0	13/0
E. Process of Writing and Speaking	1	2	4	3	4	68	1.68%	26%
E. Process of writing and speaking 6.37%		2	4	3	4	68	1.68%	26%

3	2	4	2	4	58	1.43%	22%
4	1	4	3	3	64	1.58%	25%

English Language Arts - Grades 9-12, continued

	Weight →	3	7	10	1			
	Perf. Ind.	Scope 1	Scope 2	Import	Corresp	Sum	% of Total	% Std
F. Standard English Conventions	1	3	4	2	3	60	1.48%	34%
4.30%	2	2	4	2	3	57	1.41%	33%
	3	2	4	2	3	57	1.41%	33%
G. Stylistic and Rhetorical Aspects of Writing and Speaking	1	3	4	2	3	60	1.48%	9%
17.41%	2	2	4	2	3	57	1.41%	8%
	3	3	4	2	2	59	1.46%	8%
	4	2	4	3	3	67	1.65%	10%
	5	4	4	3	3	73	1.80%	10%
	6	2	4	2	1	55	1.36%	8%
	7	3	4	2	2	59	1.46%	8%
	8	2	4	3	3	67	1.65%	10%
	9	3	4	3	2	69	1.70%	10%
	10	4	4	3	3	73	1.80%	10%
	11	2	4	3	2	66	1.63%	9%
H. Research Related Writing and Speaking	1	1	4	3	3	64	1.58%	9%
17.49%	2	1	4	2	4	55	1.36%	8%
	3	1	4	3	3	64	1.58%	9%
	4	3	4	1	4	51	1.26%	7%
	5	2	4	1	3	47	1.16%	7%
	6	2	4	1	4	48	1.19%	7%
	7	2	4	1	3	47	1.16%	7%
	8	2	4	1	4	48	1.19%	7%
	9	4	4	3	3	73	1.80%	10%
	10	4	4	3	3	73	1.80%	10%
	11	3	4	3	3	70	1.73%	10%
	12	2	4	3	4	68	1.68%	10%
Total						4049	100.00%	

Scope 1 is the amount of time where the concept/skills would be the focus of direct instruction.

Scope 2 is the frequency with which students would apply the concepts/skills after direct instruction.

Import is the importance of indicator at the grade span.

^{*} significantly low percentage performance indicator

⁺ significantly high percentage performance indicator

Health and Physical Education - Grades PK-2

	Weight →	1	1	4	3			
	Perf. Ind.	Scope 1	Scope 2	Import	Corresp	Sum	% of Total	% Std
A. Health Concepts	1	2	3	2	4	25	3.08%	37%
8.36%	2	3	3	2	4	26	3.20%	38%
	3	3	3	2	1	17	2.09%	25%
B. Health Info, Services, and Products	1	2	2	3	4	28	3.44%	100%
3.44%								
C. Health Promotion and Risk Reduction	1	2	2	2	1	15	1.85%	* 12%
15.62%	2	3	4	3	4	31	3.81%	+ 24%
	3	3	3	3	3	27	3.32%	21%
	4	3	3	3	3	27	3.32%	21%
	5	3	4	2	4	27	3.32%	21%
D. Influences on Health	1	2	2	3	4	28	3.44%	49%
7.01%	2	2	3	3	4	29	3.57%	51%
				-				
E. Communication Skills	1	3	4	3	4	31	3.81%	51%
7.50%	2	3	3	3	4	30	3.69%	49%
	4		2			2.5	2.000/	7.10
F. Decision-Making and Goal Setting	1	2	3	2	4	25	3.08%	54%
5.66%	2	2	2	2	3	21	2.58%	46%
A. Physical Fitness	1	2	4	2	4	26	3.20%	21%
15.50%	2	3	4	3	3	28	3.44%	22%
	3	2	4	2	3	23	2.83%	18%
	4	3	4	3	3	28	3.44%	22%
	5	2	2	2	3	21	2.58%	17%
B. Motor Skills	1	5	4	3	3	30	3.69%	16%
23.25%	2	3	4	3	3	28	3.44%	15%
	3	4	3	2	3	24	2.95%	13%
	4	2	2	2	4	24	2.95%	13%
	5	2	2	2	4	24	2.95%	13%
	6	3	3	2	4	26	3.20%	14%
	7	5	4	3	4	33	4.06%	17%
C. Personal and Social Interactions	1	2	3	2	3	22	2.71%	20%
13.65%	2	5	4	3	4	33	4.06%	30%
	3	4	4	3	4	32	3.94%	29%
	4	3	4	2	3	24	2.95%	22%
Total						813	100.00%	

Scope 1 is the amount of time where the concept/skills would be the focus of direct instruction.

Scope 2 is the frequency with which students would apply the concepts/skills after direct instruction.

Import is the importance of indicator at the grade span.

Corresp is the extent Maineist Relance post Representation; Information; and Results October 2003

^{*} significantly low percentage perpendicular of Education • Maine Mathematics and Science Alliance

⁺ significantly high percentage performance indicator

Health and Physical Education - Grades 3-4

	Weight →	1	1	4	3			
		Scope	Scope				% of	
	Perf. Ind.	1	2	Import	Corresp	Sum	Total	% Std
A. Health Concepts	1	3	4	3	4	31	2.69%	17%
15.80%	2	4	4	3	4	32	2.78%	+ 18%
	3	3	2	2	4	25	2.17%	14%
	4	2	2	2	4	24	2.08%	13%
	5	2	3	3	3	26	2.26%	14%
	6	2	4	2	2	20	1.74%	* 11%
	7	5	4	3	1	24	2.08%	13%
B. Health Info, Services, and Products	1	2	3	3	4	29	2.52%	37%
6.77%	2	2	2	2	4	24	2.08%	31%
	3	2	2	3	3	25	2.17%	32%
C. Health Promotion and Risk Reduction	1	3	4	3	4	31	2.69%	29%
9.38%	2	2	4	3	4	30	2.60%	28%
310070	3	2	3	2	2	19	1.65%	18%
	4	3	4	3	3	28	2.43%	26%
D. Influences on Health	1	2	2	2	3	21	1.82%	22%
8.42%	2	2	2	3	3	25	2.17%	26%
0.42/0	3	2	2	2	4	24	2.08%	25%
	4	2	4	3	3	27	2.34%	28%
	,			3	3	21	2.3170	2070
E. Communication Skills	1	3	4	3	3	28	2.43%	24%
10.16%	2	2	3	3	4	29	2.52%	25%
	3	2	3	3	4	29	2.52%	25%
	4	3	4	3	4	31	2.69%	26%
F. Decision-Making and Goal Setting	1	2	4	3	4	30	2.60%	50%
5.21%	2	2	4	3	4	30	2.60%	50%
A. Physical Fitness	1	3	4	3	3	28	2.43%	16%
15.10%	2	2	2	2	3	21	1.82%	* 12%
	3	2	2	2	4	24	2.08%	14%
	4	5	4	3	4	33	2.86%	+ 19%
	5	3	1	2	3	21	1.82%	* 12%
	6	1	4	2	3	22	1.91%	13%
	7	1	4	2	4	25	2.17%	14%

Health and Physical Education - Grades 3-4, continued

	Weight →	1	1	4	3			
	Perf. Ind.	Scope 1	Scope 2	Import	Corresp	Sum	% of Total	% Std
B. Motor Skills	1	3	2	2	3	22	1.91%	+ 10%
18.75%	2	1	1	1	1	9	0.78%	* 4%
	3	5	4	3	4	33	2.86%	+ 15%
	4	5	4	2	4	29	2.52%	+ 13%
	5	3	2	2	3	22	1.91%	+ 10%
	6	3	4	2	4	27	2.34%	+ 13%
	7	5	4	2	4	29	2.52%	+ 13%
	8	4	4	1	4	24	2.08%	+ 11%
	9	4	4	1	3	21	1.82%	+ 10%
C. Personal and Social Interactions	1	1	4	1	2	15	1.30%	* 13%
10.42%	2	4	4	2	4	28	2.43%	+ 23%
	3	5	4	3	4	33	2.86%	+ 28%
	4	3	4	1	4	23	2.00%	19%
	5	1	4	1	4	21	1.82%	18%
Total						1152	100.00%	

Scope 1 is the amount of time where the concept/skills would be the focus of direct instruction.

Scope 2 is the frequency with which students would apply the concepts/skills after direct instruction.

Import is the importance of indicator at the grade span.

^{*} significantly low percentage performance indicator

⁺ significantly high percentage performance indicator

Health and Physical Education - Grades 5-8

	Weight →	1	1	4	3			
	Perf. Ind.	Scope 1	Scope 2	Import	Corresp	Sum	% of Total	% Std
A II III C								
A. Health Concepts	1	3	4	3	4	31	2.01%	+ 16%
12.61%	2	2	2	3	4	28	1.81%	+ 14%
	3	4	4	3	3	29	1.88%	+ 15%
	4	3	3	2	3	23	1.49%	+ 12%
	5	2	2	2	4	24	1.55%	+ 12%
	6	3	2	2	4	25	1.62%	+ 13%
	7	3	2	1	1	12	0.78%	* 6%
	8	4	4	3	1	23	1.49%	+ 12%
B. Health Information, Services, and Products	1	2	2	3	4	28	1.81%	53%
3.43%	2	2	2	3	3	25	1.62%	47%
C. Health Promotion and Risk Reduction	1	2	3	3	4	29	1.88%	18%
10.61%	2	2	2	3	4	28	1.81%	17%
	3	2	3	3	3	26	1.68%	16%
	4	3	2	3	4	29	1.88%	18%
	5	2	4	3	4	30	1.94%	18%
	6	1	4	2	3	22	1.42%	13%
D. Influences on Health	1	2	3	3	3	26	1.68%	23%
7.24%	2	2	4	3	4	30	1.94%	27%
	3	2	3	3	4	29	1.88%	26%
	4	2	4	3	3	27	1.75%	24%
E. Communication Skills	1	2	4	3	4	30	1.94%	27%
7.12%	2	3	4	3	4	31	2.01%	28%
	3	3	4	3	4	31	2.01%	28%
	4	2	3	1	3	18	1.16%	16%
F. Decision-Making and Goal Setting	1	3	4	3	4	31	2.01%	21%
9.57%	2	2	4	3	4	30	1.94%	20%
	3	3	4	3	3	28	1.81%	19%
	4	3	4	3	4	31	2.01%	21%
	5	2	2	3	4	28	1.81%	19%
A. Physical Fitness	1	5	4	3	3	30	1.94%	12%
A. I hysical Pittless 16.30%	2	5	4	3	4	33	2.13%	13%
10.30%	3	4	2	3	4	30	1.94%	12%
	4	5	4	3	4	33	2.13%	13%
	5	5		3	4	33	2.13%	
			4					13%
	6	5	4	3	4	33	2.13%	13%
	7	5	4	3	3	30	1.94%	12%

8 5 4 3 3 30 1.94% 12%

Health and Physical Education - Grades 5-8, continued

	Weight →	1	1	4	3			
	Perf. Ind.	Scope 1	Scope 2	Import	Corresp	Sum	% of Total	% Std
B. Motor Skills	1	5	4	3	4	33	2.13%	11%
18.56%	2	5	4	3	4	33	2.13%	11%
	3	5	4	3	4	33	2.13%	11%
	4	5	4	3	4	33	2.13%	11%
	5	5	3	3	4	32	2.07%	11%
	6	5	4	3	3	30	1.94%	10%
	7	5	4	3	4	33	2.13%	11%
	8	5	4	3	3	30	1.94%	10%
	9	5	4	3	3	30	1.94%	10%
C. Personal and Social Interactions	1	5	4	3	4	33	2.13%	15%
14.55%	2	5	4	3	3	30	1.94%	13%
	3	5	4	3	4	33	2.13%	15%
	4	5	4	3	4	33	2.13%	15%
	5	5	4	3	4	33	2.13%	15%
	6	5	4	3	4	33	2.13%	15%
	7	5	4	3	3	30	1.94%	13%
Total						1546	100.00%	

Scope 1 is the amount of time where the concept/skills would be the focus of direct instruction.

Scope 2 is the frequency with which students would apply the concepts/skills after direct instruction.

Import is the importance of indicator at the grade span.

^{*} significantly low percentage performance indicator

⁺ significantly high percentage performance indicator

Health and Physical Education - Grades 9-12

	Weight →	1	1	4	3			
	Perf. Ind.	Scope 1	Scope 2	Import	Corresp	Sum	% of Total	% Std
A. Health Concepts	1	3	4	3	3	28	2.12%	+ 11%
18.97%	2	2	3	2	3	22	1.66%	9%
	3	3	4	3	3	28	2.12%	+ 11%
	4	2	3	3	3	26	1.97%	10%
	5	1	1	1	3	15	1.13%	* 6%
	6	2	2	2	2	18	1.36%	7%
	7	2	2	2	4	24	1.81%	10%
	8	1	2	2	4	23	1.74%	9%
	9	3	3	3	3	27	2.04%	+ 11%
	10	2	3	2	2	19	1.44%	8%
	11	3	3	3	1	21	1.59%	8%
B. Health Information, Services, and Products	1	2	3	2	3	22	1.66%	23%
7.26%	2	2	2	3	4	28	2.12%	29%
	3	2	3	2	3	22	1.66%	23%
	4	2	2	2	4	24	1.81%	25%
C. Health Promotion and Risk Reduction	1	1	1	2	3	19	1.44%	31%
4.61%	2	2	2	2	3	21	1.59%	34%
	3	2	2	2	3	21	1.59%	34%
D. Influences on Health	1	1	2	2	3	20	1.51%	21%
7.18%	2	2	3	3	4	29	2.19%	31%
7.10/0	3	1	2	2	4	23	1.74%	24%
	4	2	3	3	2	23	1.74%	24%
E. Communication Skills	1	3	3	3	4	30	2.27%	18%
12.93%	2	2	3	3	3	26	1.97%	15%
12.75/0	3	2	2	2	4	24	1.81%	14%
	4	1	2	2	4	23	1.74%	13%
	5	1	2	2	4	23	1.74%	13%
	6	2	3	2	3	22	1.66%	13%
	7	1	2	2	4	23	1.74%	13%
F. Decision-Making and Goal Setting	1	2	4	3	3	27	2.04%	21%
9.90%	2	2	2	2	4	24	1.81%	18%
7,5070	3	3	3	3	4	30	2.27%	23%
	4	2	3	2	4	25	1.89%	19%
	5	2	3	2	4	25	1.89%	19%
A. Physical Fitness	1	4	4	3	4	32	2.42%	22%
11.19%	2	3	4	3	4	31	2.34%	21%
11.17/0	3	2	1	2	4	23	1.74%	16%

Maine's Balance of Representation: Information and Results October 2003 Maine Department of Education • Maine Mathematics and Science Alliance

4	3	4	3	4	31	2.34%	21%
5	3	4	3	4	31	2.34%	21%

Health and Physical Education - Grades 9-12

	Weight →	1	1	4	3			
	Perf. Ind.	Scope 1	Scope 2	Import	Corresp	Sum	% of Total	% Std
B. Motor Skills	1	5	4	3	4	33	2.49%	+ 17%
14.36%	2	3	4	3	4	31	2.34%	+ 16%
	3	3	4	3	4	31	2.34%	+ 16%
	4	4	4	3	4	32	2.42%	+ 17%
	5	2	4	3	3	27	2.04%	+ 14%
	6	2	4	3	3	27	2.04%	+ 14%
	7	1	1	1	1	9	0.68%	* 5%
C. Personal and Social Interactions	1	2	4	3	3	27	2.04%	15%
13.61%	2	2	3	2	2	19	1.44%	11%
	3	2	4	3	4	30	2.27%	17%
	4	2	2	1	4	20	1.51%	11%
	5	2	2	3	4	28	2.12%	16%
	6	2	4	3	4	30	2.27%	17%
	7	1	1	3	4	26	1.97%	14%
Total	·		-			1323	100.00%	

Scope 1 is the amount of time where the concept/skills would be the focus of direct instruction.

Scope 2 is the frequency with which students would apply the concepts/skills after direct instruction.

Import is the importance of indicator at the grade span.

^{*} significantly low percentage performance indicator

⁺ significantly high percentage performance indicator

Mathematics Grades PK-2

	Weight →	2	5	5	2			
	Perf.	_			_		% of	
	Ind.	Scope 1	Scope 2	Import	Corresp	Sum	Total	% Std
A. Number and Number Sense	1	5	4	4	3	56	4.79%	25%
19.50%	2	5	4	4	4	58	4.96%	25%
	3	5	4	4	3	56	4.79%	25%
	4	5	4	4	4	58	4.96%	25%
B. Computation	1	5	4	4	4	58	4.96%	33%
14.88%	2	5	4	4	4	58	4.96%	33%
	3	5	4	4	4	58	4.96%	33%
C. Data Analysis and Statistics	1	2	3	4	4	47	4.02%	50%
8.04%	2	2	3	4	4	47	4.02%	50%
D. Probability	1	1	1	1	1	14	1.20%	100%
1.20%								
E. Geometry	1	2	2	3	4	37	3.17%	30%
10.44%	2	2	3	3	3	40	3.42%	33%
	3	1	4	3	4	45	3.85%	37%
F. Measurement	1	4	4	3	3	49	4.19%	+ 42%
10.01%	2	1	2	1	1	19	1.63%	* 16%
	3	4	3	4	3	49	4.19%	+ 42%
G. Patterns, Relations, Functions	1	5	4	4	4	58	4.96%	37%
13.34%	2	3	3	3	2	40	3.42%	26%
	3	5	4	4	4	58	4.96%	37%
H. Algebra Concepts	1	5	4	4	3	56	4.79%	49%
9.75%	2	5	4	4	4	58	4.96%	51%
I. Discrete Mathematics	1	2	2	4	4	42	3.59%	60%
5.99%	2	2	2	2	2	28	2.40%	40%
J. Reasoning	1	1	1	1	2	16	1.37%	53%
2.57%	2	1	1	1	1	14	1.20%	47%
K. Communication	1	2	4	4	3	50	4.28%	100%
4.28%								
Total						1169	100.00%	

Scope 1 is the amount of time where the concept/skills would be the focus of direct instruction.

Import is the importance of indicator at the grade span.

Scope 2 is the frequency with which students would apply the concepts/skills after direct instruction.

- * significantly low percentage performance indicator
- + significantly high percentage performance indicator

Mathematics Grades 3-4

	Weight →	2	5	5	2			
	Perf.						% of	
	Ind.	Scope 1	Scope 2	Import	Corresp	Sum	Total	% Std
A. Number and Number Sense	1	4	4	4	3	54	4.96%	41%
12.21%	2	3	2	3	3	37	3.40%	28%
	3	3	3	3	3	42	3.86%	32%
B. Computation	1	5	4	4	3	56	5.14%	28%
18.37%	2	3	2	3	3	37	3.40%	19%
	3	5	4	4	3	56	5.14%	28%
	4	5	4	3	3	51	4.68%	26%
C. Data Analysis and Statistics	1	3	3	3	3	42	3.86%	50%
7.71%	2	3	3	3	3	42	3.86%	50%
D. Probability	1	2	2	2	2	28	2.57%	44%
5.79%	2	2	2	3	3	35	3.21%	56%
		_	_				21277	
E. Geometry	1	1	4	3	3	43	3.95%	26%
15.24%	2	2	4	3	3	45	4.13%	27%
10.2.70	3	1	2	3	3	33	3.03%	20%
	4	2	4	3	3	45	4.13%	27%
	•				3	13	1.1370	2170
F. Measurement	1	5	4	4	4	116	10.65%	+ 73%
14.69%	2	4	3	3	3	44	4.04%	* 28%
11.0270					3		1.0 170	2070
G. Patterns, Relations, Functions	1	4	3	4	3	49	4.50%	57%
7.90%	2	3	2	3	3	37	3.40%	43%
7.5070		3		3	3	31	3.1070	1370
H. Algebra Concepts	1	2	3	2	2	33	3.03%	50%
6.06%	2	2	3	2	2	33	3.03%	50%
0.0070						33	2.0270	2070
I. Discrete Mathematics	1	2	3	2	2	33	3.03%	+ 70%
4.32%	2	1	1	1	1	14	1.29%	* 30%
7.32/0		1	1	1	1	17	1.27/0	3070
J. Reasoning	1	3	4	3	4	49	4.50%	100%
4.50%	1	3	-		-	77	4.5070	10070
4.3070								
K. Communication	1	3	3	2	2	35	3.21%	100%
3.21%	1	3	3		2	33	J.∠1/0	10070
3.2170								
Total						1089	100.00%	
1 otai		<u> </u>	<u> </u>		<u> </u>	1009	100.00%	

Sum has been adjusted due to the extreme range and importance of indicator.

Scope 1 is the amount of time where the concept/skills would be the focus of direct instruction.

Scope 2 is the frequency with which students would apply the concepts/skills after direct instruction.

Import is the importance of indicator at the grade span.

- * significantly low percentage performance indicator
- + significantly high percentage performance indicator

Mathematics Grades 5-8

	Weight →	2	5	5	2			
	Perf. Ind.	Scope 1	Scope 2	Import	Corresp	Sum	% of Total	% Std
A. Number and Number Sense	1	5	4	4	4	58	3.16%	22%
14.07%	2	4	4	4	4	56	3.05%	22%
	3	5	4	4	4	116	6.32%	+ 45%
	4	2	2	2	2	28	1.53%	* 11%
B. Computation	1	5	4	4	4	232	12.65%	+ 80%
15.81%	2	5	4	4	4	58	3.16%	* 20%
C. Data Analysis and Statistics	1	2	3	3	3	40	2.18%	31%
7.14%	2	4	3	3	3	44	2.40%	34%
	3	2	3	4	4	47	2.56%	36%
D. Probability	1	2	2	3	3	35	1.91%	27%
7.20%	2	2	2	3	4	37	2.02%	28%
	3	2	2	2	3	30	1.64%	23%
	4	2	1	3	3	30	1.64%	23%
E. Geometry	1	2	3	4	4	47	2.56%	24%
10.58%	2	5	4	4	4	58	3.16%	30%
	3	2	3	3	3	40	2.18%	21%
	4	3	3	4	4	49	2.67%	25%
F. Measurement	1	3	4	4	4	54	2.94%	38%
7.80%	2	2	3	3	3	40	2.18%	28%
	3	3	3	4	4	49	2.67%	34%
G. Patterns, Relations, Functions	1	5	4	4	3	56	3.05%	36%
8.51%	2	3	3	3	3	42	2.29%	27%
	3	5	4	4	4	58	3.16%	37%
H. Algebra Concepts	1	5	3	3	3	46	2.51%	18%
14.07%	2	4	3	4	3	49	2.67%	19%
	3	4	3	4	4	51	2.78%	+ 20%
	4	2	3	3	3	40	2.18%	16%
	5	3	2	2	3	32	1.74%	* 12%
	6	2	3	3	3	40	2.18%	16%
I. Discrete Mathematics	1	2	2	2	2	28	1.53%	44%
3.44%	2	2	3	2	3	35	1.91%	56%
J. Reasoning	1	5	4	4	4	58	3.16%	51%
6.22%	2	5	4	4	3	56	3.05%	49%
K. Communication	1	4	3	4	4	51	2.78%	54%
5.18%	2	3	3	3	4	44	2.40%	46%
Total						1834	100.00%	

Sum has been adjusted due to the extreme range and importance of indicator.

 $[\]textbf{Scope 1} \text{ is the amount of time where the concept/skills would be the focus of direct instruction.} \\$

 $[\]textbf{Scope 2} \text{ is the frequency with which students would apply the concepts/skills after direct instruction.} \\$

Import is the importance of indicator at the grade span. **Corresp** is the extent to which the concept/skills are reflected in national standards.

- * significantly low percentage performance indicator + significantly high percentage performance indicator

Mathematics Grades 9-12

	Weight →	2	5	5	2			
	Perf.	Scope	Scope				% of	
	Ind.	1	2	Import	Corresp	Sum	Total	% Std
A. Number and Number Sense	1	2	3	3	4	42	3.39%	50%
6.77%	2	2	3	3	4	42	3.39%	50%
B. Computation	1	3	4	3	4	49	3.95%	+ 70%
5.65%	2	2	1	2	1	21	1.69%	* 30%
C. Data Analysis and Statistics	1	2	2	3	3	35	2.82%	21%
13.23%	2	2	3	3	3	40	3.23%	+ 24%
	3	1	2	3	3	33	2.66%	20%
	4	1	2	3	4	35	2.82%	21%
	5	1	1	2	2	21	1.69%	* 13%
D. Probability	1	2	2	3	4	37	2.98%	51%
5.81%	2	2	2	3	3	35	2.82%	49%
E. Geometry	1	2	3	3	3	40	3.23%	29%
11.29%	2	4	3	4	4	51	4.11%	36%
	3	3	3	4	4	49	3.95%	35%
F. Measurement	1	2	3	3	4	42	3.39%	50%
6.77%	2	3	3	3	3	42	3.39%	50%
G. Patterns, Relations, Functions	1	3	3	4	4	49	3.95%	27%
14.68%	2	5	4	3	4	53	4.27%	29%
	3	5	3	3	4	48	3.87%	26%
	4	3	2	2	3	32	2.58%	18%
H. Algebra Concepts	1	5	3	4	4	53	4.27%	27%
15.65%	2	3	3	2	2	35	2.82%	18%
	3	5	4	3	4	53	4.27%	27%
	4	5	4	3	4	53	4.27%	27%
I. Discrete Mathematics	1	2	1	1	2	18	1.45%	17%
8.63%	2	2	1	3	4	32	2.58%	+ 30%
	3	1	1	1	1	14	1.13%	* 13%
	4	2	3	4	2	43	3.47%	+ 40%
J. Reasoning	1	3	3	2	2	35	2.82%	100%
2.82%								
K. Communication	1	5	4	4	2	54	4.35%	50%
8.71%	2	5	4	4	2	54	4.35%	50%
Total						1240	100.00%	

Scope 1 is the amount of time where the concept/skills would be the focus of direct instruction.

Scope 2 is the frequency with which students would apply the concepts/skills after direct instruction.

Import is the importance of indicator at the grade span.

- * significantly low percentage performance indicator
- + significantly high percentage performance indicator

Modern Languages - Grades PK-2

	Weight →	1	1	1	1			
	Perf. Ind.	Scope 1	Scope 2	Import	Corresp	Sum	% of Total	% Std
A. Person-to-Person Communication	1	4	4	3	4	15	7.94%	37%
21.69%	2	2	4	3	4	13	6.88%	32%
2310371	3	2	4	3	4	13	6.88%	32%
B. Reading, Listening, and Viewing for Understanding	1	2	4	3	4	13	6.88%	15%
44.97%	2	0	0	3	4	7	3.70%	* 8%
11.5778	3	5	4	4	4	17	8.99%	+ 20%
	4	5	4	4	4	17	8.99%	+ 20%
	5	5	4	4	4	17	8.99%	+ 20%
	6	2	4	4	4	14	7.41%	+ 16%
C. Oral and Written Presentations 5.82%	1	3	4	2	2	11	5.82%	100%
D. Workings of Language	1	5	4	3	4	16	8.47%	+ 70%
12.17%	2	1	1	3	2	7	3.70%	* 30%
E. Cultural Practices, Products, and Perspectives	1	1	1	3	4	9	4.76%	50%
9.52%	2	1	1	3	4	9	4.76%	50%
F. Cross-Cultural Connections and Comparisons 5.82%	1	2	1	4	4	11	5.82%	100%
Total						189	100.00%	

Scope 1 is the amount of time where the concept/skills would be the focus of direct instruction.

Scope 2 is the frequency with which students would apply the concepts/skills after direct instruction.

Import is the importance of indicator at the grade span.

^{*} significantly low percentage performance indicator

⁺ significantly high percentage performance indicator

Modern Languages - Grades 3-4

	Weight →	1	1	1	1			
		Scope					% of	
	Perf. Ind.	1	Scope 2	Import	Corresp	Sum	Total	% Std
A. Person-to-Person Communication	1	5	4	3	4	16	5.05%	21%
23.66%	2	4	4	3	4	15	4.73%	20%
	3	4	4	3	4	15	4.73%	20%
	4	4	4	3	4	15	4.73%	20%
	5	2	4	4	4	14	4.42%	19%
B. Reading, Listening, and Viewing for Understanding	1	2	4	3	4	13	4.80%	+ 14%
34.34%	2	0	0	2	2	4	1.48%	* 4%
34.34%	3	5	4	4	4	17	6.28%	+ 18%
	4	2	4	3	4	13	4.80%	+ 14%
	5	5	4	4	4	17	6.28%	+ 18%
	6	2	4	4	4	14	5.17%	+ 15%
	7	4	4	3	4	15	5.54%	+ 16%
C. Oral and Written Presentations	1	5	4	4	4	17	4.03%	27%
15.19%	2	4	4	4	4	16	3.80%	25%
	3	4	4	4	4	16	3.80%	25%
	4	5	4	4	2	15	3.56%	23%
D.Workings of Language	1	1	1	3	4	9	2.84%	33%
8.52%	2	1	1	3	4	9	2.84%	33%
	3	1	1	3	4	9	2.84%	33%
E. Cultural Practices, Products, and Perspectives	1	2	2	3	4	11	3.47%	31%
11.04%	2	2	2	4	4	12	3.79%	34%
	3	2	2	4	4	12	3.79%	34%
F. Cross-Cultural Connections and								
Comparisons	1	5	4	4	4	17	5.36%	+ 74%
7.26%	2	0	0	3	3	6	1.89%	* 26%
Total						317	100.00%	

Scope 1 is the amount of time where the concept/skills would be the focus of direct instruction.

Scope 2 is the frequency with which students would apply the concepts/skills after direct instruction.

Import is the importance of indicator at the grade span.

^{*} significantly low percentage performance indicator

⁺ significantly high percentage performance indicator

Modern Languages - Grades 5-8

S		Weight →	1	1	1	1			
No. Perf. Ind. 1 Scope 2 Import Corresp Sum Total % Std			Scope					% of	
Communication		Perf. Ind.	. —	Scope 2	Import	Corresp	Sum	Total	% Std
18.48% 2 3 4 3 4 14 5.75% 31% B. Reading, Listening, and Viewing for Understanding			_		4	4	17	6.000/	200/
Seading, Listening, and Viewing for Understanding									
B. Reading, Listening, and Viewing for Understanding 1 4 4 4 3 4 15 3.81% + 14% 27.93% 2 2 1 1 3 3 3 9 2.29% * 8% 3 2 4 4 4 3 13 3.30% 12% 4 1 1 4 3 4 12 3.05% 11% 5 2 4 3 2 11 2.79% 10% 6 1 4 3 4 12 3.05% 11% 7 1 3 3 3 4 11 2.79% 10% 8 1 4 3 2 10 2.54% 9% 9 5 4 4 4 17 4.32% + 15% C. Oral and Written Presentations 1 2 3 4 4 12 3.59% 20% 8 18.26% 2 2 2 4 4 4 12 3.59% 20% 18.26% 2 2 2 4 4 4 12 3.59% 20% D.Workings of Language 1 1 4 4 3 4 12 3.59% 20% D.Workings of Language 1 1 4 4 3 4 12 3.59% 20% E. Cultural Practices, Products, and Perspectives 1 2 2 2 4 4 4 12 3.59% 29% E. Cultural Practices, Products, and Perspectives 1 2 2 2 4 4 4 12 3.59% 35% 9 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	18.48%								
Viewing for Understanding		3	3	4	3	4	14	5.75%	31%
Viewing for Understanding									
27.93% 2 2 1 3 3 9 2.29% *8%		1	4	1	2	4	15	2 910/	1.40/
3 2 4 4 3 13 3.30% 12%									
1	21.93%								
S									
C. Oral and Written Presentations									
7									
S									
Section			1						10%
C. Oral and Written Presentations 1 2 3 4 3 12 3.59% 20% 18.26% 2 2 2 4 4 4 12 3.59% 20% 3 3 3 4 4 14 4.19% + 23% 4 1 2 4 4 11 3.29% * 18% 5 2 4 4 2 11 3.59% 20% D.Workings of Language 1 1 4 3 4 12 3.59% 20% 12.28% 2 5 4 4 4 17 5.09% 41% 3 1 4 3 4 12 3.59% 29% E. Cultural Practices, Products, and Perspectives 1 2 2 4 4 12 3.59% 35% 10.18% 2 2 2 4 4 10 2.99% 29% F. Cross-Cultural Connections and Comparisons 1 1 1 4 4 4 10 2.99% 29% 12.87% 2 2 2 4 4 4 12 3.59% 28% 3 1 1 4 4 4 10 2.99% 28% 3 1 1 4 4 4 10 2.99% 28% 3 2 2 2 4 4 4 12 3.59% 29%									9%
18.26% 2 2 2 4 4 12 3.59% 20%		9	5	4	4	4	17	4.32%	+ 15%
18.26% 2 2 2 4 4 12 3.59% 20%									
3 3 3 4 4 14 4.19% + 23% 4 1 2 4 4 11 3.29% * 18% 5 2 4 4 2 12 3.59% 20% D.Workings of Language	C. Oral and Written Presentations	1	2	3	4	3	12	3.59%	20%
A	18.26%	2	2	2	4	4	12	3.59%	20%
D.Workings of Language		3	3	3	4	4	14	4.19%	+ 23%
D.Workings of Language 1 1 1 4 3 4 12 3.59% 29% 12.28% 2 5 4 4 4 17 5.09% 41% 3 1 4 3 4 12 3.59% 29%		4	1	2	4	4	11	3.29%	* 18%
D.Workings of Language 1 1 1 4 3 4 12 3.59% 29% 12.28% 2 5 4 4 4 17 5.09% 41% 3 1 4 3 4 12 3.59% 29%		5	2	4	4	2	12	3.59%	20%
12.28% 2 5 4 4 4 17 5.09% 41%									
12.28% 2 5 4 4 4 17 5.09% 41%	D.Workings of Language	1	1	4	3	4	12	3.59%	29%
E. Cultural Practices, Products, and Perspectives 1 2 2 4 4 12 3.59% 35% 35% 10.18% 2 2 2 4 4 12 3.59% 35% 35% 3 1 1 4 4 10 2.99% 29% 5 12.87% 2 2 2 4 4 12 3.59% 28% 3 1 1 4 4 4 10 2.99% 28% 3 1 1 4 4 4 10 2.99% 28% 3 1 1 1 4 4 4 10 2.99% 28% 3 1 1 1 4 4 4 10 2.99% 23% 28% 3 1 1 1 4 4 4 10 2.99% 23%									
E. Cultural Practices, Products, and Perspectives 1 2 2 4 4 12 3.59% 35% 10.18% 2 2 2 4 4 12 3.59% 35% 35% 35% 3 1 1 1 4 4 10 2.99% 29% F. Cross-Cultural Connections and Comparisons 1 1 1 1 4 4 4 10 2.99% 23% 12.87% 2 2 2 2 4 4 12 3.59% 28% 3 1 1 4 4 4 10 2.99% 23%									
and Perspectives 1 2 2 4 4 12 3.59% 35% 10.18% 2 2 2 2 4 4 12 3.59% 35% 3 1 1 4 4 10 2.99% 29% F. Cross-Cultural Connections and Comparisons 1 1 1 4 4 10 2.99% 23% 12.87% 2 2 2 4 4 12 3.59% 28% 3 1 1 4 4 10 2.99% 23% 3 1 1 4 4 10 2.99% 23%			-					0.00770	
and Perspectives 1 2 2 4 4 12 3.59% 35% 10.18% 2 2 2 2 4 4 12 3.59% 35% 3 1 1 4 4 10 2.99% 29% F. Cross-Cultural Connections and Comparisons 1 1 1 4 4 10 2.99% 23% 12.87% 2 2 2 4 4 12 3.59% 28% 3 1 1 4 4 10 2.99% 23% 3 1 1 4 4 10 2.99% 23%	E. Cultural Practices, Products								
10.18% 2 2 2 4 4 12 3.59% 35% 3 1 1 4 4 10 2.99% 29% F. Cross-Cultural Connections and Comparisons 1 1 1 4 4 10 2.99% 23% 12.87% 2 2 2 4 4 12 3.59% 28% 3 1 1 4 4 10 2.99% 23% 3 1 1 4 4 10 2.99% 23%		1	2	2	4	4	12	3.59%	35%
F. Cross-Cultural Connections and Comparisons 1 1 1 4 4 10 2.99% 29% 12.87% 2 2 2 4 4 10 2.99% 23% 3 1 1 4 4 12 3.59% 28% 3 1 1 4 4 10 2.99% 23%	10.18%	2	2	2	4	4	12	3.59%	35%
F. Cross-Cultural Connections and Comparisons 1 1 1 1 4 4 10 2.99% 23% 12.87% 2 2 2 4 4 12 3.59% 28% 3 1 1 4 4 10 2.99% 23%		3	1	1	4	4	10		29%
and Comparisons 1 1 1 4 4 4 10 2.99% 23% 12.87% 2 2 2 4 4 12 3.59% 28% 3 1 1 4 4 10 2.99% 23% 2 2 2 4 4 10 2.99% 23%									_,,,
and Comparisons 1 1 1 4 4 4 10 2.99% 23% 12.87% 2 2 2 4 4 12 3.59% 28% 3 1 1 4 4 10 2.99% 23% 2 2 2 4 4 10 2.99% 23%	F. Cross-Cultural Connections								
3 1 1 4 4 10 2.99% 23%		1	1	1	4	4	10	2.99%	23%
	12.87%	2	2	2	4	4	12	3.59%	28%
						4	10		23%
									26%
			_		-				
Total 334 100.00%	Total						334	100.00%	

Scope 1 is the amount of time where the concept/skills would be the focus of direct instruction.

Scope 2 is the frequency with which students would apply the concepts/skills after direct instruction.

Import is the importance of indicator at the grade span.

^{*} significantly low percentage performance indicator

+ significantly high percentage performance indicator

Modern Languages - Grades 9-12

	Weight →	1	1	1	1			
		Scope					% of	
	Perf. Ind.	1	Scope 2	Import	Corresp	Sum	Total	% Std
A. Person-to-Person	1	_	4	2	2	1.5	E (00)	270/
Communication	1	5	4	3	3	15	5.69%	37%
15.54%	2	2	4	3	2	11	4.17%	27%
	3	5	4	3	3	15	5.69%	37%
B. Reading, Listening, and								
Viewing for Understanding	1	5	4	3	3	15	3.21%	19%
16.50%	2	5	4	3	3	15	3.21%	19%
	3	5	4	3	3	15	3.21%	19%
	4	5	4	3	4	16	3.43%	21%
	5	5	4	4	3	16	3.43%	21%
Classics only	6							
Classics only	7							
C. Oral and Written Presentations	1	4	4	3	2	13	2.19%	13%
16.50%	2	2	4	3	4	13	2.19%	13%
	3	5	4	2	2	13	2.19%	13%
	4	5	4	3	2	14	2.36%	14%
	5	5	4	3	3	15	2.53%	15%
	6	5	4	3	3	15	2.53%	15%
	7	5	4	3	3	15	2.53%	15%
	,			3	3	15	2.5570	1570
D. Workings of Language	1	5	4	3	4	16	3.60%	20%
18.20%	2	5	4	3	4	16	3.60%	20%
	3	5	4	4	4	17	3.82%	21%
	4	5	4	3	4	16	3.60%	20%
	5	5	4	3	4	16	3.60%	20%
E. Cultural Practices, Products,								
and Perspectives	1	5	4	4	3	16	3.60%	25%
14.61%	2	5	4	4	3	16	3.60%	25%
- 110273	3	5	4	4	3	16	3.60%	25%
	4	5	4	4	4	17	3.82%	26%
E Company Continued Control								
F. Cross-Cultural Connections and Comparisons	1	5	4	3	4	16	3.60%	19%
18.65%	2	5	4	4	4	17	3.82%	20%
10.03 //	3	5	4	4	4	17	3.82%	20%
	4	5	4	4	4	17	3.82%	20%
	5	5	4	4	3	16	3.60%	19%
	3		<u> </u>	<u> </u>	<u> </u>	10	3.0070	17/0
Total						445	100.00%	

Scope 1 is the amount of time where the concept/skills would be the focus of direct instruction.

Scope 2 is the frequency with which students would apply the concepts/skills after direct instruction.

Import is the importance of indicator at the grade span.

- * significantly low percentage performance indicator
- + significantly high percentage performance indicator

Classical Languages - Grades 9-12

Due to the current scarcity of classical programs below grade 9 in Maine schools, the participants representing the classical languages at the Balance of Representation Institute had the expertise and experience to produce rating for the 9-12 grade span only.

omy.	Weight →	1	1	1	1			
	Perf. Ind.	Scope 1	Scope 2	Import	Corresp	Sum	% of Total	% Std
A. Person-to-Person								
Communication	Modern 1							
4.24%	Modern 2							
	3	3	3	3	3	12	4.24%	100%
B. Reading, Listening, and Viewing for Understanding	1	1	1	1	3	6	2.12%	* 8%
26.14%	Modern 2							
	3	5	4	4	4	17	6.01%	+ 23%
	4	5	4	4	4	17	6.01%	+ 23%
Modern only	5							
	6	5	4	4	4	17	6.01%	+ 23%
	7	5	4	4	4	17	6.01%	+ 23%
C. Oral and Written Presentations	Modern 1						0.00%	
0.00%	Modern 2						0.00%	
Modern only	3						0.00%	
Modern only	4						0.00%	
Modern only	5						0.00%	
Modern only	6						0.00%	
Modern only	7						0.00%	
D.M. I. CI	1	5	4	4	4	17	6.01%	20%
D. Workings of Language	2	5	4	4	4	17	6.01%	20%
30.03%	3	5	4	4	4	17	6.01%	20%
	4	5	4	4	4	17	6.01%	20%
	5	5						
	5	5	4	4	4	17	6.01%	20%
E. Cultural Practices, Products, and	1	-	A	<i>A</i>	A	17	6.01%	270/
Perspectives	1	5	4	4	4	17		27%
21.90%	2	2	4	3	2	11	3.89%	18%
	3	5	4	4	4	17	6.01%	27%
	4	5	4	4	4	17	6.01%	27%

Classical Languages - Grades 9-12, continued

	Weight →	1	1	1	1			
	Perf.						% of	
	Ind.	Scope 1	Scope 2	Import	Corresp	Sum	Total	% Std
F. Cross-Cultural Connections and								
Comparisons	Modern 1							
17.69%	Modern 2							
	3	5	4	4	4	17	6.01%	34%
	4	5	4	4	4	17	6.01%	34%
	5	5	4	4	3.07	16.07	5.68%	32%
Total						283.07	100.00%	100%

Scope 1 is the amount of time where the concept/skills would be the focus of direct instruction.

Scope 2 is the frequency with which students would apply the concepts/skills after direct instruction.

Import is the importance of indicator at the grade span.

^{*} significantly low percentage performance indicator

⁺ significantly high percentage performance indicator

Science and Technology - Grades PK-2

	Weight →	1	1	1	1			
	Perf. Ind.	Scope 1	Scope 2	Import	Corresp	Sum	% of Total	% Std
A. Classifying Life Forms	1	4	4	3	2	13	2.23%	24%
9.43%	2	5	4	3	3	15	2.57%	27%
	3	4	3	4	3	14	2.40%	25%
	4	3	4	4	2	13	2.23%	24%
B. Ecology	1	2	3	3	4	12	2.06%	20%
10.46%	2	4	3	3	4	14	2.40%	23%
	3	2	3	4	4	13	2.23%	21%
	4	4	3	3	2	12	2.06%	20%
	5	3	3	2	2	10	1.72%	16%
C. Cells	1	2	3	4	4	13	2.23%	29%
7.72%	2	3	3	3	4	13	2.23%	29%
	3	1	3	1	4	9	1.54%	20%
	4	2	4	2	2	10	1.72%	22%
D. Continuity and Change	1	3	3	3	4	13	2.23%	24%
9.43%	2	4	4	3	4	15	2.57%	27%
	3	4	3	4	4	15	2.57%	27%
	4	3	3	3	3	12	2.06%	22%
E. Structure of Matter	1	4	4	3	3	14	2.40%	35%
6.86%	2	4	4	2	4	14	2.40%	35%
	3	4	4	3	1	12	2.06%	30%
F. The Earth	1	3	4	4	4	15	2.57%	39%
6.52%	2	3	4	4	3	14	2.40%	37%
	3	4	1	3	1	9	1.54%	24%
G. The Universe	1	3	4	4	4	15	2.57%	+ 48%
5.32%	2	3	1	3	1	8	1.37%	* 26%
	3	3	1	3	1	8	1.37%	* 26%
H. Energy	1	2	3	3	3	11	1.89%	48%
3.95%	2	4	4	3	1	12	2.06%	52%
I. Motion	1	4	3	3	4	14	2.40%	58%
4.12%	2	1	3	3	3	10	1.72%	42%
1270					-			
J. Inquiry and Problem Solving	1	2	4	3	4	13	2.23%	+ 30%

7.55%	2	2	4	2	4	12	2.06%	27%
	3	2	4	3	3	12	2.06%	27%
	4	1	1	2	3	7	1.20%	* 16%

Science and Technology - Grades PK-2, continued

	Weight →	1	1	1	1			
	Perf. Ind.	Scope 1	Scope 2	Import	Corresp	Sum	% of Total	% Std
K. Scientific Reasoning	1	1	3	3	3	10	1.72%	16%
10.63%	2	1	3	3	3	10	1.72%	16%
	3	1	4	3	4	12	2.06%	19%
	4	1	4	1	2	8	1.37%	13%
	5	1	4	3	3	11	1.89%	18%
	6	1	3	3	4	11	1.89%	18%
L. Communication	1	2	3	3	4	12	2.06%	20%
10.12%	2	2	3	3	1	9	1.54%	15%
	3	1	4	1	3	9	1.54%	15%
	4	1	4	3	1	9	1.54%	15%
	5	1	4	2	3	10	1.72%	17%
	6	1	4	2	3	10	1.72%	17%
M. Implications of Sci and Tech	1	2	1	3	3	9	1.54%	20%
7.89%	2	1	1	3	4	9	1.54%	20%
	3	1	1	2	4	8	1.37%	17%
	4	2	4	2	4	12	2.06%	26%
	5	1	2	1	4	8	1.37%	17%
Total						583	100.00%	

Scope 1 is the amount of time where the concept/skills would be the focus of direct instruction.

Scope 2 is the frequency with which students would apply the concepts/skills after direct instruction.

Import is the importance of indicator at the grade span.

^{*} significantly low percentage performance indicator

⁺ significantly high percentage performance indicator

Science and Technology - Grades 3-4

	Weight →	1	1	1	1			
	Perf. Ind.	Scope 1	Scope 2	Import	Corresp	Sum	% of Total	% Std
A. Classifying Life Forms	1	2	3	4	4	13	2.20%	28%
7.80%	2	1	2	4	4	11	1.86%	24%
	3	1	3	2	3	9	1.53%	20%
	4	2	3	4	4	13	2.20%	28%
B. Ecology	1	3	3	3	4	13	2.20%	30%
7.29%	2	2	3	2	1	8	1.36%	19%
	3	2	1	4	4	11	1.86%	26%
	4	2	1	4	4	11	1.86%	26%
C. Cells	1	3	3	4	1	11	1.86%	25%
7.46%	2	2	1	4	4	11	1.86%	25%
	3	1	2	2	4	9	1.53%	20%
	4	3	3	4	3	13	2.20%	30%
D. Continuity and Change	1	1	1	3	4	9	1.53%	26%
5.93%	2	1	1	2	1	5	0.85%	* 14%
	3	2	3	3	1	9	1.53%	26%
	4	2	2	4	4	12	2.03%	+ 34%
E. Structure of Matter	1	2	3	2	1	8	1.36%	47%
2.88%	2	2	3	3	1	9	1.53%	53%
F. The Earth	1	1	1	2	1	5	0.85%	* 14%
6.10%	2	2	3	4	4	13	2.20%	+ 36%
	3	2	1	2	3	8	1.36%	22%
	4	2	3	4	1	10	1.69%	+ 28%
G. The Universe	1	2	3	4	4	13	2.20%	29%
7.63%	2	1	2	2	4	9	1.53%	20%
	3	3	3	4	4	14	2.37%	31%
	4	3	1	4	1	9	1.53%	20%
H. Energy	1	1	3	2	1	7	1.19%	* 33%
3.56%	2	3	3	4	4	14	2.37%	+ 67%
		_	_					
I. Motion	1	2	3	3	4	12	2.03%	38%
5.42%	2	1	3	4	4	12	2.03%	38%
	3	3	1	3	1	8	1.36%	25%
		_		_	_		. 0	
J. Inquiry and Problem Solving	1	3	4	2	3	12	2.03%	17%
12.20%	2	3	4	3	4	14	2.37%	19%
	3	3	4	3	4	14	2.37%	19%

4	2	1	2	4	9	1.53%	13%
5	1	4	2	4	11	1.86%	15%
6	2	4	2	4	12	2.03%	17%

Science and Technology - Grades 3-4, continued

	Weight →	1	1	1	1			
	Perf. Ind.	Scope 1	Scope 2	Import	Corresp	Sum	% of Total	% Std
K. Scientific Reasoning	1	2	4	2	4	12	2.03%	17%
12.03%	2	1	3	2	4	10	1.69%	14%
	3	2	4	3	4	13	2.20%	18%
	4	3	4	3	2	12	2.03%	17%
	5	3	4	3	4	14	2.37%	20%
	6	3	4	2	1	10	1.69%	14%
L. Communication	1	2	4	3	4	13	2.20%	15%
14.41%	2	2	4	2	4	12	2.03%	14%
	3	2	4	2	4	12	2.03%	14%
	4	3	4	3	4	14	2.37%	16%
	5	2	4	2	4	12	2.03%	14%
	6	2	4	2	4	12	2.03%	14%
	7	1	4	1	4	10	1.69%	12%
M. Implications of Sci and Tech	1	2	3	2	4	11	1.86%	26%
7.29%	2	2	3	1	4	10	1.69%	23%
	3	2	3	2	4	11	1.86%	26%
	4	2	3	2	4	11	1.86%	26%
Total						590	100.00%	

Scope 1 is the amount of time where the concept/skills would be the focus of direct instruction.

Scope 2 is the frequency with which students would apply the concepts/skills after direct instruction.

Import is the importance of indicator at the grade span.

Corresp is the extent to which the concept/skills are reflected in national standards.

^{*} significantly low percentage performance indicator

⁺ significantly high percentage performance indicator

Science and Technology - Grades 5-8

	Weight →	1	1	1	1			
		Scope					% of	
	Perf. Ind.	1	Scope 2	Import	Corresp	Sum	Total	% Std
A. Classifying Life Forms	1	3	3	4	4	14	1.54%	38%
4.07%	2	1	3	2	2	8	0.88%	* 22%
	3	3	4	4	4	15	1.65%	+ 41%
B. Ecology	1	4	3	4	4	15	1.65%	21%
7.69%	2	4	3	4	4	15	1.65%	21%
	3	4	3	4	1	12	1.32%	17%
	4	2	3	4	4	13	1.43%	19%
	5	4	3	4	4	15	1.65%	21%
C. Cells	1	3	3	4	4	14	1.54%	23%
6.70%	2	2	4	3	2	11	1.21%	18%
	3	3	2	4	4	13	1.43%	21%
	4	3	2	2	4	11	1.21%	18%
	5	3	2	4	3	12	1.32%	20%
D.Continuity and Change	1	4	4	4	4	16	1.76%	28%
6.26%	2	4	4	4	4	16	1.76%	28%
	3	3	3	4	1	11	1.21%	19%
	4	3	3	4	4	14	1.54%	25%
E. Structure of Matter	1	3	2	3	3	11	1.21%	12%
9.89%	2	2	3	3	1	9	0.99%	10%
	3	2	3	3	1	9	0.99%	10%
	4	3	4	2	3	12	1.32%	13%
	5	2	4	2	3	11	1.21%	12%
	6	3	4	2	4	13	1.43%	14%
	7	3	3	2	4	12	1.32%	13%
	8	3	3	3	4	13	1.43%	14%
F. The Earth	1	2	2	4	4	12	1.32%	+ 16%
8.02%	2	3	3	4	3	13	1.43%	+ 18%
	3	4	3	4	1	12	1.32%	+ 16%
	4	5	4	4	4	17	1.87%	+ 23%
	5	4	1	1	1	7	0.77%	10%
	6	2	3	1	1	7	0.77%	10%
	7	1	1	2	1	5	0.55%	* 7%
G. The Universe	1	5	3	2	1	11	1.21%	19%
6.37%	2	3	3	2	1	9	0.99%	* 16%
	3	3	3	2	4	12	1.32%	21%
	4	4	3	2	1	10	1.10%	17%

5 4 4 4 4 4 16 1.76% + 28%

Science and Technology - Grades 5-8, continued

	Weight →	1	1	1	1			
	- 3	Scope	Scope				% of	
	Perf. Ind.	1	2	Import	Corresp	Sum	Total	% Std
H. Energy	1	5	4	4	4	17	1.87%	+ 22%
8.68%	2	5	3	4	4	16	1.76%	20%
	3	3	3	2	4	12	1.32%	15%
	4	3	3	2	4	12	1.32%	15%
	5	2	3	2	4	11	1.21%	* 14%
	6	2	2	3	4	11	1.21%	* 14%
I. Motion	1	3	3	4	1	11	1.21%	38%
3.19%	2	2	3	3	2	10	1.10%	34%
	3	3	2	2	1	8	0.88%	28%
J. Inquiry and Problem Solving	1	5	4	4	4	17	1.87%	+ 21%
8.79%	2	5	4	4	4	17	1.87%	+ 21%
	3	3	3	3	3	12	1.32%	15%
	4	2	2	3	3	10	1.10%	* 13%
	5	3	3	2	3	11	1.21%	14%
	6	3	3	3	4	13	1.43%	16%
K. Scientific Reasoning	1	3	3	2	3	11	1.21%	11%
10.88%	2	3	3	2	3	11	1.21%	11%
	3	2	3	2	3	10	1.10%	10%
	4	3	4	2	3	12	1.32%	12%
	5	2	3	2	3	10	1.10%	10%
	6	4	4	4	3	15	1.65%	+ 15%
	7	2	3	2	1	8	0.88%	* 8%
	8	4	3	2	3	12	1.32%	12%
	9	2	3	2	3	10	1.10%	10%
L. Communication	1	3	4	3	3	13	1.43%	17%
8.46%	2	4	4	3	4	15	1.65%	+ 19%
	3	4	1	2	2	9	0.99%	* 12%
	4	5	4	4	4	17	1.87%	+ 22%
	5	4	4	2	4	14	1.54%	+ 18%
	6	3	4	1	1	9	0.99%	* 12%
M. Implications of Sci and Tech	1	3	4	4	4	15	1.65%	+ 15%
10.99%	2	3	3	4	4	14	1.54%	14%
	3	1	3	1	4	9	0.99%	* 9%
	4	3	3	4	4	14	1.54%	14%
	5	1	3	1	4	9	0.99%	* 9%
	6	3	4	4	4	15	1.65%	+ 15%
	7	3	4	4	4	15	1.65%	+ 15%
	8	1	3	1	4	9	0.99%	* 9%
Total						910	100%	

Scope 1 is the amount of time where the concept/skills would be the focus of direct instruction.

Scope 2 is the frequency with which student would apply the concepts/skills after direct instruction. Import is the importance of indicator at the grade span.

^{*} significantly low percentage performance indicator + significantly higher performance indicator

Science and Technology - Grades 9-12

	Weight →	1	1	1	1			
	, vergite 2	-	-		-		% of	
	Perf. Ind.	Scope 1	Scope 2	Import	Corresp	Sum	Total	% Std
A. Classifying Life Forms	1	3	2	4	4	13	1.59%	41%
3.92%	2	3	2	3	2	10	1.22%	31%
	3	2	3	2	2	9	1.10%	28%
B. Ecology	1	2	3	2	4	11	1.35%	23%
5.75%	2	3	3	1	1	8	0.98%	* 17%
	3	3	3	2	4	12	1.47%	26%
	4	4	4	4	4	16	1.96%	+ 34%
C. Cells	1	3	2	3	4	12	1.47%	22%
6.61%	2	3	2	3	4	12	1.47%	22%
	3	2	3	2	3	10	1.22%	19%
	4	2	2	2	4	10	1.22%	19%
	5	3	3	2	2	10	1.22%	19%
						0		
D.Continuity and Change	1	3	3	3	4	13	1.59%	+ 18%
8.94%	2	2	2	1	1	6	0.73%	* 8%
	3	2	3	3	4	12	1.47%	+ 16%
	4	2	3	2	2	9	1.10%	12%
	5	3	2	1	3	9	1.10%	12%
	6	2	3	3	4	12	1.47%	+ 16%
	7	3	3	3	3	12	1.47%	+ 16%
E. Structure of Matter	1	3	3	4	3	13	1.59%	16%
9.91%	2	3	2	3	4	12	1.47%	15%
	3	3	3	2	2	10	1.22%	12%
	4	1	4	3	4	12	1.47%	15%
	5	3	4	2	4	13	1.59%	16%
	6	3	2	2	2	9	1.10%	11%
	7	2	3	3	4	12	1.47%	15%
			_				:	'
F. The Earth	1	3	2	3	3	11	1.35%	15%
9.06%	2	3	3	3	2	11	1.35%	15%
	3	4	2	3	4	13	1.59%	18%
	4	4	3	3	3	13	1.59%	18%
	5	3	3	2	3	11	1.35%	15%
	6	4	3	4	4	15	1.84%	20%
G. The Universe	1	3	2	2	4	11	1.35%	39%
3.43%	2	2	2	2	2	8	0.98%	29%
	3	2	2	3	2	9	1.10%	32%

Science and Technology - Grades 9-12, continued

	Weight →	1	1	1	1			
							% of	
	Perf. Ind.	Scope 1	Scope 2	Import	Corresp	Sum	Total	% Std
H. Energy	1	3	3	1	1	8	0.98%	10%
9.79%	2	2	1	2	3	8	0.98%	10%
	3	2	2	1	3	8	0.98%	10%
	4	1	3	3	3	10	1.22%	13%
	5	2	2	1	1	6	0.73%	* 8%
	6	1	3	3	4	11	1.35%	+ 14%
	7	3	1	1	2	7	0.86%	9%
	8	2	3	2	4	11	1.35%	+ 14%
	9	2	4	2	3	11	1.35%	+ 14%
I. Motion	1	2	2	4	2	10	1.22%	16%
7.83%	2	1	2	2	3	8	0.98%	* 13%
	3	3	4	3	4	14	1.71%	+ 22%
	4	3	3	1	1	8	0.98%	* 13%
	5	2	4	2	3	11	1.35%	17%
	6	4	3	2	4	13	1.59%	20%
J. Inquiry and Problem Solving	1	2	4	4	3	13	1.59%	25%
6.36%	2	4	4	4	4	16	1.96%	31%
	3	4	4	2	2	12	1.47%	23%
	4	3	3	2	3	11	1.35%	21%
K. Scientific Reasoning	1	2	4	3	4	13	1.59%	17%
9.30%	2	1	3	3	4	11	1.35%	14%
	3	2	4	3	4	13	1.59%	17%
	4	2	4	3	4	13	1.59%	17%
	5	2	4	3	4	13	1.59%	17%
	6	2	4	3	4	13	1.59%	17%
L. Communication	1	2	4	3	4	13	1.59%	13%
11.87%	2	2	4	1	1	8	0.98%	* 8%
	3	3	4	3	4	14	1.71%	+ 14%
	4	3	4	3	4	14	1.71%	+ 14%
	5	3	4	3	4	14	1.71%	+ 14%
	6	2	3	1	2	8	0.98%	* 8%
	7	4	4	3	4	15	1.84%	+ 15%
	8	2	4	2	3	11	1.35%	11%
M. Implications of Sci and Tech	1	1	1	2	2	6	0.73%	* 10%
7.22%	2	3	3	4	2	12	1.47%	+ 20%
	3	2	3	2	4	11	1.35%	+ 19%
	4	2	3	2	2	9	1.10%	15%
	5	2	3	2	3	10	1.22%	17%
	6	3	3	3	2	11	1.35%	+ 19%
Total						817	100.00%	

Scope 1 is the amount of time where the concept/skills would be the focus of direct instruction.

Scope 2 is the frequency with which student would apply the concepts/skills after direct instruction.

Import is the importance of indicator at the grade span.

Corresp is the extent to which the concept/skills are reflected in national standards.

* significantly low percentage performance indicator + significantly higher performance indicator

Social Studies - Grades PK-2

	Weight →	0.5	0.5	13	3			
	Perf. Ind.	Scope 1	Scope 2	Import	Corresp	Sum	% of Total	% Std
A. Rights, Responsibilities, and								
Participation	1	3	4	4	4	67.5	9.71%	100%
9.71%								
B. Purpose and Types of	1	4	4	1	4	20	4.170/	1000/
Government 4.17%	1	4	4	1	4	29	4.17%	100%
C. Fundamental Principles of Government and Constitutions	1	4	4	2	2	36	5.18%	100%
5.18%								
D. International Relations	1	4	4	3	2	49	7.05%	100%
7.05%								
A. Chronology	1	3	4	1	3	25.5	3.67%	53%
6.90%	2	3	4	1	2	22.5	3.24%	47%
B. Historical Knowledge, Concepts,	1	2	4	4	4	67.5	0.710/	520/
and Patterns 18.55%	2	3	4	4	2	67.5 61.5	9.71% 8.84%	52% 48%
C. Historical Inquiry, Analysis, and Interpretation	1	3	4	4	4	67.5	9.71%	100%
9.71%								
A. Skills and Tools	1	5	4	4	3	65.5	9.42%	100%
9.42%								
B. Human Interaction with Environments	1	5	4	4	3	65.5	9.42%	100%
9.42%								
A. Personal and Consumer Economics	1	3	4	2	4	41.5	5.97%	100%
5.97%								

Social Studies - Grades PK-2, continued

	Weight →	0.5	0.5	13	3			
	Perf. Ind.	Scope 1	Scope 2	Import	Corresp	Sum	% of Total	% Std
B. Economic Systems of the United States	1	3	4	2	4	41.5	5.97%	100%
5.97%								
C. Comparative Systems	1	1	1	1		14	2.01%	100%
2.01%								
D. International Trade and Global Interdependence	1	3	4	2	4	41.5	5.97%	100%
5.97%								
Total						695.5	100.00%	

Scope 1 is the amount of time where the concept/skills would be the focus of direct instruction.

Scope 2 is the frequency with which students would apply the concepts/skills after direct instruction.

Import is the importance of indicator at the grade span.

^{*} significantly low percentage performance indicator

⁺ significantly high percentage performance indicator

Social Studies - Grades 3-4

	Weight →	0.5	0.5	13	3			T
	Perf. Ind.	Scope 1	Scope 2	Import	Corresp	Sum	% of Total	% Std
A. Rights, Responsibilities, and								
Participation	1	3	4	2	2	35.5	3.09%	33%
9.26%	2	3	4	2	2	35.5	3.09%	33%
	3	3	4	2	2	35.5	3.09%	33%
B. Purpose and Types of		_	_					
Government	1	3	3	3	4	54	4.69%	51%
9.17%	2	3	4	3	3	51.5	4.48%	49%
C. Fundamental Principles of	4				,		4.7204	1000/
Government and Constitutions	1	1	1	3	4	52	4.52%	100%
4.52%								
D. International Relations	1	3	4	2	4	41.5	3.61%	46%
D. International Relations 7.82%	2	3	4	3	2	48.5	4.22%	54%
1.82%	2	3	4	3	2	46.3	4.22%	34%
A. Chronology	1	3	2	2	1	31.5	2.74%	43%
6.43%	2	5	4	2	4	42.5	3.69%	57%
B. Historical Knowledge, Concepts, and Patterns	1	1	3	4	1	57	4.95%	47%
10.65%	2	5	4	4	3	65.5	5.69%	53%
C. Historical Inquiry, Analysis, and Interpretation	1	5	4	2	2	36.5	3.17%	100%
3.17%								
A. Skills and Tools	1	5	4	4	3	65.5	5.69%	56%
10.17%	2	3	4	3	3	51.5	4.48%	44%
B. Human Interaction with Environments	1	2	4	4	4	67	5.82%	36%
16.25%	2	3	4	3	3	51.5	4.48%	28%
	3	5	4	4	4	68.5	5.95%	37%
A. Personal and Consumer Economics	1	2	1	2	3	36.5	3.17%	49%
6.43%	2	1	4	2	3	37.5	3.26%	51%
B. Economic Systems of the United	1	2	4	2	3	38	3.30%	52%
States 6 20%	1 2	2 2	3	2 2	2	34.5	3.00%	
6.30%			3	2	2	34.3	3.00%	48%

Social Studies - Grades 3-4, continued

	Weight →	0.5	0.5	13	3			
	Perf. Ind.	Scope 1	Scope 2	Import	Corresp	Sum	% of Total	% Std
C. Comparative Systems	1	3	4	4	2	61.5	5.35%	100%
5.35%								
D. International Trade and Global Interdependence	1	3	4	3	3	51.5	4.48%	100%
4.48%								
					·			
Total						1150.5	100.00%	

Scope 1 is the amount of time where the concept/skills would be the focus of direct instruction.

Scope 2 is the frequency with which students would apply the concepts/skills after direct instruction.

Import is the importance of indicator at the grade span.

^{*} significantly low percentage performance indicator

⁺ significantly high percentage performance indicator

Social Studies - Grades 5-8

	Weight →	0.5	0.5	13	3			
	0	Scope	Scope				% of	
	Perf. Ind.	1	2	Import	Corresp	Sum	Total	% Std
A. Rights, Responsibilities, and				_	_			
Participation	1	2	4	3	3	51	1.81%	17%
10.49%	2	3	4	4	4	67.5	2.40%	23%
	3	4	3	4	2	61.5	2.18%	21%
	4	2	4	3	3	51	1.81%	17%
	5	3	4	4	3	64.5	2.29%	22%
B. Purpose and Types of								
Government	1	4	4	3	3	52	1.85%	16%
11.78%	2	4	4	3	3	52	1.85%	16%
	3	5	4	4	3	65.5	2.32%	20%
	4	2	1	2	4	39.5	1.40%	12%
	5	5	4	4	4	68.5	2.43%	21%
	6	4	3	3	4	54.5	1.93%	16%
C. Fundamental Principles of								
Government and Constitutions	1	5	4	4	4	68.5	2.43%	27%
9.16%	2	5	4	4	4	68.5	2.43%	27%
	3	5	4	4	4	68.5	2.43%	27%
	4	5	4	3	3	52.5	1.86%	20%
D. International Relations	1	2	3	2	3	37.5	1.33%	* 24%
5.63%	2	5	4	4	4	68.5	2.43%	+ 43%
	3	5	4	3	3	52.5	1.86%	33%
A. Chronology	1	4	3	2	3	38.5	1.37%	27%
5.00%	2	5	3	3	3	52	1.85%	37%
5.00%	3	3	2	3	3	50.5	1.79%	36%
B. Historical Knowledge, Concepts,								
and Patterns	1	5	4	4	3	65.5	2.32%	25%
9.21%	2	5	4	4	3	65.5	2.32%	25%
	3	4	4	4	3	65	2.31%	25%
	4	3	2	4	3	63.5	2.25%	24%
C. Historical Inquiry, Analysis, and								
Interpretation	1	3	1	3	3	50	1.77%	18%
9.87%	2	3	1	3	3	50	1.77%	18%
	3	3	2	4	3	63.5	2.25%	23%
	4	3	3	3	3	51	1.81%	18%
	5	2	3	4	3	63.5	2.25%	23%

Social Studies - Grades 5-8, continued

	Weight →	0.5	0.5	13	3			
	2	Scope					% of	
	Perf. Ind.	1	Scope 2	Import	Corresp	Sum	Total	% Std
A. Skills and Tools	1	5	4	4	4	68.5	2.43%	34%
7.199	% 2	5	4	4	4	68.5	2.43%	34%
	3	5	4	4	3	65.5	2.32%	32%
B. Human Interaction with								
Environments	1	5	4	4	4	68.5	2.43%	25%
9.579	% 2	4	4	4	4	68	2.41%	25%
	3	5	4	4	3	65.5	2.32%	24%
	4	3	4	4	4	67.5	2.40%	25%
A. Personal and Consumer								
Economics	1	2	2	4	3	63	2.24%	+ 45%
4.979	% 2	2	2	3	3	50	1.77%	+ 36%
	3	2	2	1	4	27	0.96%	* 19%
B. Economic Systems of the United								
States	1	3	2	4	3	63.5	2.25%	25%
8.86	% 2	2	1	3	3	49.5	1.76%	20%
	3	4	3	3	4	54.5	1.93%	22%
	4	4	4	2	4	42	1.49%	17%
	5	2	2	2	4	40	1.42%	16%
C. Comparative Systems	1	3	2	4	4	66.5	2.36%	62%
3.830	% 2	5	2	2	4	41.5	1.47%	38%
D.International Trade and Global								
Interdependence	1	3	2	2	3	37.5	1.33%	30%
4.459		5	2	3	3	51.5	1.83%	41%
	3	2	1	2	3	36.5	1.30%	29%
Tot	al					2817.5	100.00%	

Scope 1 is the amount of time where the concept/skills would be the focus of direct instruction.

Scope 2 is the frequency with which students would apply the concepts/skills after direct instruction.

Import is the importance of indicator at the grade span.

^{*} significantly low percentage performance indicator

⁺ significantly high percentage performance indicator

Social Studies - Grades 9-12

	Weight →	0.5	0.5	13	3			
	Perf.							
	Ind.	Scope 1	Scope 2	Import	Corresp	Sum	% of Total	% Std
A. Rights, Responsibilities, and								
Participation	1	4	3	4	3	64.5	2.45%	+ 33%
7.50%	2	5	4	3	3	52.5	1.99%	27%
	3	3	2	3	2	47.5	1.80%	24%
	4	1	1	2	2	33	1.25%	* 17%
B. Purpose and Types of								
Government	1	4	4	3	2	49	1.86%	19%
9.58%	2	3	3	3	3	51	1.94%	20%
	3	2	4	3	3	51	1.94%	20%
	4	3	2	3	3	50.5	1.92%	20%
	5	3	3	3	3	51	1.94%	20%
C. Fundamental Principles of								
Government and Constitutions	1	4	5	3	4	55.5	2.11%	+ 17%
12.70%	2	2	1	2	2	33.5	1.27%	* 10%
	3	5	5	3	3	53	2.01%	16%
	4	5	4	3	4	55.5	2.11%	+ 17%
	5	3	3	3	2	48	1.82%	14%
	6	3	4	3	3	51.5	1.95%	15%
	7	3	2	2	3	37.5	1.42%	11%
D. International Relations	1	3	2	3	3	50.5	1.92%	26%
7.36%	2	3	3	3	1	45	1.71%	23%
	3	2	2	3	2	47	1.78%	24%
	4	3	4	3	3	51.5	1.95%	27%
A. Chronology	1	5	4	4	3	65.5	2.49%	100%
2.49%								
B. Historical Knowledge, Concepts,								
and Patterns	1	4	4	4	3	65	2.47%	15%
16.70%	2	5	4	4	3	65.5	2.49%	15%
	3	5	4	4	3	65.5	2.49%	15%
	4	5	4	4	3	65.5	2.49%	15%
	5	5	4	4	3	65.5	2.49%	15%
	6	3	2	3	2	47.5	1.80%	11%
	7	5	4	4	3	65.5	2.49%	15%

Social Studies - Grades 9-12, continued

	Weight →	0.5	0.5	13	3			
	Perf. Ind.	Scope 1	Scope 2	Import	Corresp	Sum	% of Total	% Std
C. Historical Inquiry, Analysis, and								
Interpretation	1	5	4	4	3	65.5	2.49%	25%
10.06%	2	5	4	4	4	68.5	2.60%	26%
	3	5	4	4	3	65.5	2.49%	25%
	4	5	4	4	3	65.5	2.49%	25%
A. Skills and Tools	1	5	4	4	4	68.5	2.60%	39%
6.74%	2	4	3	3	4	54.5	2.07%	31%
	3	4	3	3	4	54.5	2.07%	31%
B. Human Interaction with								
Environments	1	5	4	4	4	68.5	2.60%	26%
9.85%	2	5	4	4	4	68.5	2.60%	26%
	3	3	3	3	4	54	2.05%	21%
	4	5	4	4	4	68.5	2.60%	26%
A. Personal and Consumer Economics	1	1	2	3	3	49.5	1.88%	40%
4.71%	2	2	3	2	3	37.5	1.42%	30%
7.7170	3	2	2	2	3	37.3	1.40%	30%
B. Economic Systems of the United								
States	1	3	2	3	2	47.5	1.80%	29%
6.24%	2	2	3	3	3	50.5	1.92%	+ 31%
	3	1	1	2	1	30	1.14%	* 18%
	4	2	1	2	3	36.5	1.39%	22%
C. Comparative Systems	1	2	2	2	2	34	1.29%	47%
2.73%	2	3	3	2	3	38	1.44%	53%
D. International Trade and Global Interdependence	1	2	2	2	3	37	1.40%	42%
3.34%	2	3	3	3	3	51	1.94%	58%
Total						2634.5	100.00%	

Scope 1 is the amount of time where the concept/skills would be the focus of direct instruction.

Scope 2 is the frequency with which students would apply the concepts/skills after direct instruction.

Import is the importance of indicator at the grade span.

^{*} significantly low percentage performance indicator

⁺ significantly high percentage performance indicator

Visual and Performing Arts - Grades PK-2

	Weight →	2	5	11	7			
	Perf.	Scope	Scope					
	Ind.	1	2	Import	Corresp	Sum	% of Total	% Std
A. Creative Expression	1	5	4	3	4	83	4.6%	7%
66.25%	2	5	4	3	4	88	4.9%	7%
	3	3	3	2	4	72	4.0%	6%
	4	4	4	3	4	89	5.0%	+ 8%
Performing Arts only	5	3	4	3	4	81	4.6%	7%
Performing Arts only	6	3	2	2	3	60	3.3%	* 5%
	7	4	4	3	4	78	4.4%	7%
	8	5	4	3	4	94	5.3%	+ 8%
	9	3	3	2	3	70	3.9%	6%
	10	4	4	3	4	89	5.0%	+ 8%
	11	2	3	2	2	59	3.3%	* 5%
Music and Dance only	12	5	4	3	4	87	4.9%	7%
Music and Dance only	13	4	4	3	4	88	5.0%	7%
	14	4	4	2	3	72	4.0%	6%
Performing Arts only	15	5	4	2	3	71	4.0%	6%
B. Cultural Heritage	1	4	3	3	3	78	4.4%	24%
18.38%	2	4	3	2	3	66	3.7%	20%
	3	3	3	3	4	75	4.2%	23%
	4	3	3	2	2	55	3.1%	17%
	5	3	3	2	2	54	3.0%	16%
C. Criticism and Aesthetics	1	5	4	3	3	79	4.5%	29%
15.37%	2	5	4	3	4	86	4.8%	31%
	3	3	3	2	3	55	3.1%	20%
	4	3	3	2	2	54	3.0%	20%
Total						1779	100.0%	

Scope 1 is the amount of time where the concept/skills would be the focus of direct instruction.

Scope 2 is the frequency with which students would apply the concepts/skills after direct instruction.

Import is the importance of indicator at the grade span.

^{*} significantly low percentage performance indicator

⁺ significantly high percentage performance indicator

Visual and Performing Arts - Grades 3-4

	Weight →	2	5	11	7			
	Perf. Ind.	Scope 1	Scope 2	Import	Corresp	Sum	% of Total	% Std
A. Creative Expression	1	5	4	3	4	85	5.9%	13%
45.23%	2	5	4	3	4	89	6.2%	+ 14%
	3	4	4	3	3	78	5.4%	12%
	4	5	4	3	3	78	5.5%	12%
	5	3	2	2	3	53	3.7%	* 8%
Music only	6	5	4	3	4	91	6.3%	+ 14%
	7	4	4	3	4	83	5.8%	13%
Music only	8	5	4	3	4	91	6.3%	+ 14%
B. Cultural Heritage	1	4	3	2	3	66	4.6%	25%
18.75%	2	4	4	2	2	62	4.3%	23%
	3	4	3	3	3	69	4.8%	26%
	4	4	3	2	3	71	5.0%	26%
C. Criticism and Aesthetics	1	3	2	1	2	38	2.6%	* 7%
36.02%	2	5	4	3	4	84	5.9%	+ 16%
	3	5	4	3	4	86	6.0%	+ 17%
	4	5	4	3	4	87	6.1%	+ 17%
	5	5	4	3	4	88	6.1%	+ 17%
	6	4	4	3	3	74	5.1%	+ 14%
	7	4	4	2	2	61	4.3%	12%
Total						1434	100.0%	

Scope 1 is the amount of time where the concept/skills would be the focus of direct instruction.

Scope 2 is the frequency with which students would apply the concepts/skills after direct instruction.

Import is the importance of indicator at the grade span.

^{*} significantly low percentage performance indicator

⁺ significantly high percentage performance indicator

Visual and Performing Arts - Grades 5-8

	Weight →	2	5	11	7			
	Perf. Ind.	Scope 1	Scope 2	Import	Corresp	Sum	% of Total	% Std
A. Creative Expression	1	3	4	3	3	77	5.4%	+ 12%
46.15%	2	5	4	3	3	88	6.2%	+ 13%
	3	4	4	2	3	73	5.1%	11%
	4	4	4	3	4	86	6.0%	+ 13%
	5	2	2	2	1	38	2.7%	* 6%
	6	2	3	2	2	52	3.7%	8%
	7	2	3	3	2	63	4.4%	10%
Performing Arts only	8	4	3	3	3	85	6.0%	+ 13%
Music and Dance only	9	5	4	4	4	97	6.8%	+ 15%
B. Cultural Heritage	1	5	4	3	3	79	5.5%	20%
27.67%	2	4	3	2	3	63	4.4%	16%
	3	3	3	2	2	55	3.8%	14%
	4	4	3	2	3	72	5.0%	18%
	5	4	3	2	3	62	4.3%	16%
	6	2	3	3	2	64	4.5%	16%
C. Criticism and Aesthetics	1	3	3	3	3	77	5.4%	+ 21%
26.18%	2	2	2	3	3	62	4.3%	17%
	3	2	2	2	1	41	2.9%	* 11%
	4	3	3	2	2	54	3.8%	14%
	5	3	2	2	2	56	3.9%	15%
	6	4	4	3	3	84	5.9%	+ 23%
Total						1424	100.0%	

Scope 1 is the amount of time where the concept/skills would be the focus of direct instruction.

Scope 2 is the frequency with which students would apply the concepts/skills after direct instruction.

Import is the importance of indicator at the grade span.

^{*} significantly low percentage performance indicator

⁺ significantly high percentage performance indicator

Visual and Performing Arts - Grades 9-12

	Weight →	2	5	11	7			
	Perf. Ind.	Scope 1	Scope 2	Import	Corresp	Sum	% of Total	% Std
A. Creative Expression	1	5	4	3	4	89	7.1%	+ 14%
50.14%	2	4	3	3	4	81	6.5%	+ 13%
	3	3	3	2	3	63	5.1%	10%
	4	3	3	2	3	69	5.5%	11%
	5	5	4	2	3	77	6.2%	12%
	6	3	3	2	2	54	4.3%	9%
	7	2	3	2	2	47	3.8%	* 7%
	8	4	4	3	4	87	7.0%	+ 14%
	9	4	3	2	2	59	4.7%	9%
B. Cultural Heritage	1	4	3	3	4	79	6.4%	21%
30.22%	2	4	3	2	3	68	5.4%	18%
	3	4	4	3	4	86	6.9%	23%
	4	4	4	3	4	85	6.8%	23%
	5	4	3	2	3	59	4.7%	16%
C. Criticism and Aesthetics	1	4	3	3	3	77	6.2%	31%
19.64%	2	3	3	2	2	54	4.3%	22%
	3	3	3	2	2	57	4.6%	23%
	4	4	3	2	2	57	4.6%	23%
Total						1246	100.0%	

Scope 1 is the amount of time where the concept/skills would be the focus of direct instruction.

Scope 2 is the frequency with which students would apply the concepts/skills after direct instruction.

Import is the importance of indicator at the grade span.

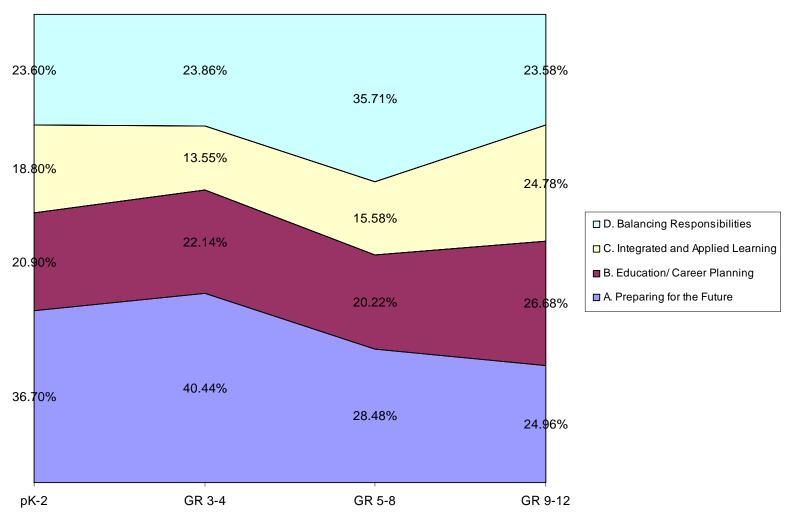
^{*} significantly low percentage performance indicator

⁺ significantly high percentage performance indicator

Appendix E

Content Standard Relative Weightings by Discipline

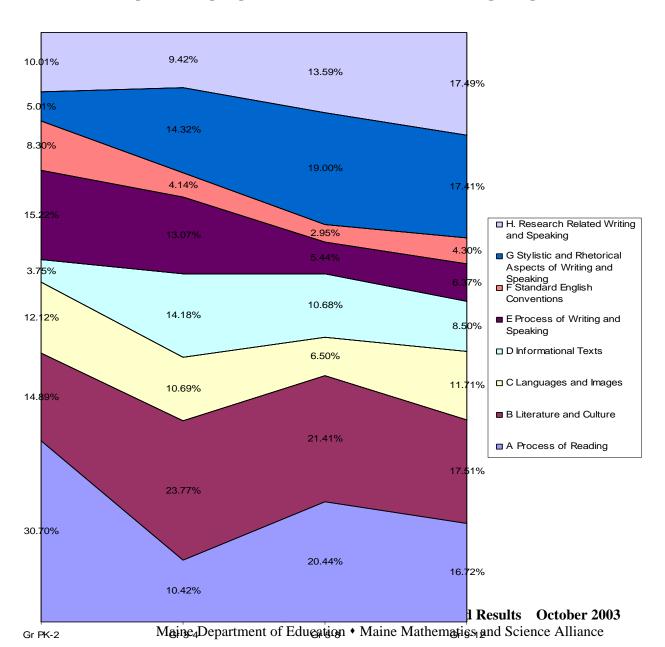
Career Preparation Content Standards Weightings



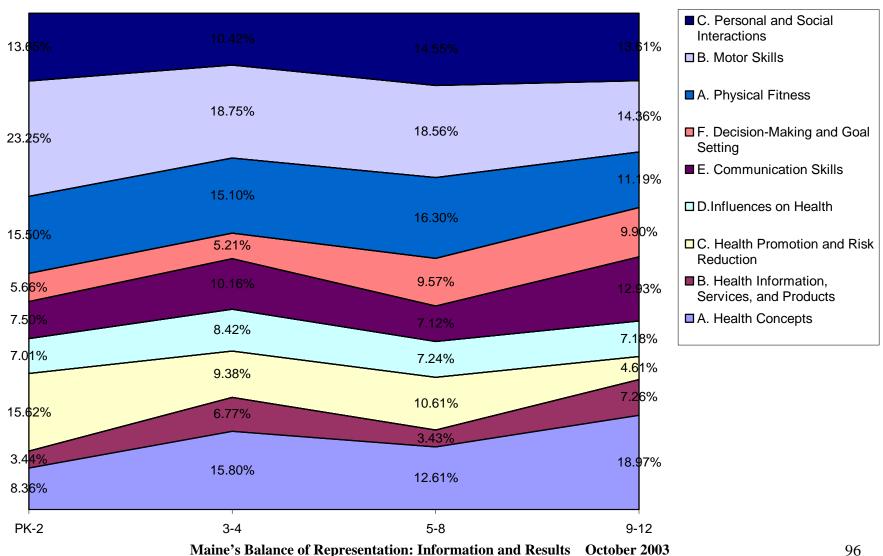
Maine's Balance of Representation: Information and Results October 2003

Maine Department of Education • Maine Mathematics and Science Alliance

English Language Arts Content Standards Weightings

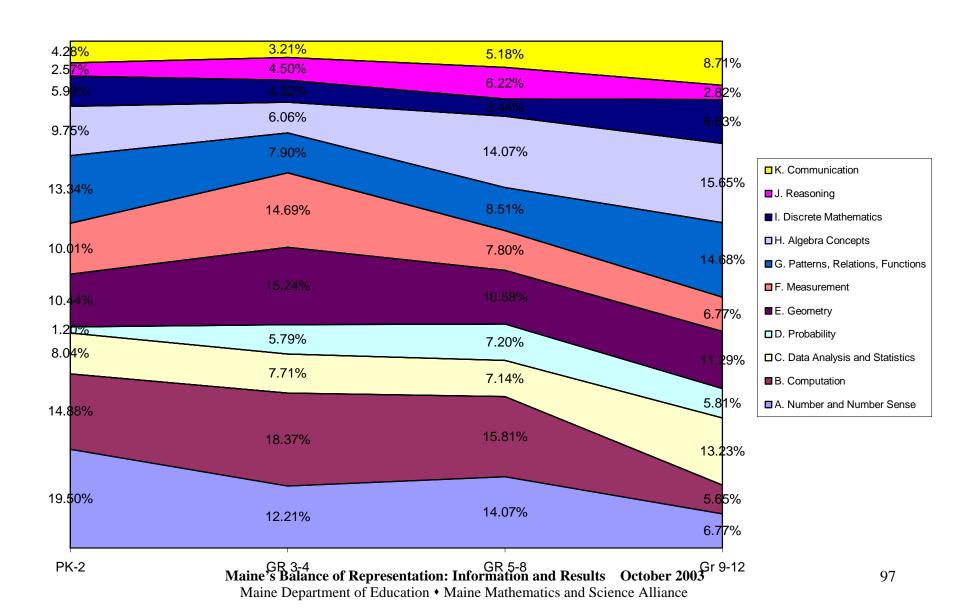


Health and Physical Education Content Standards Weightings



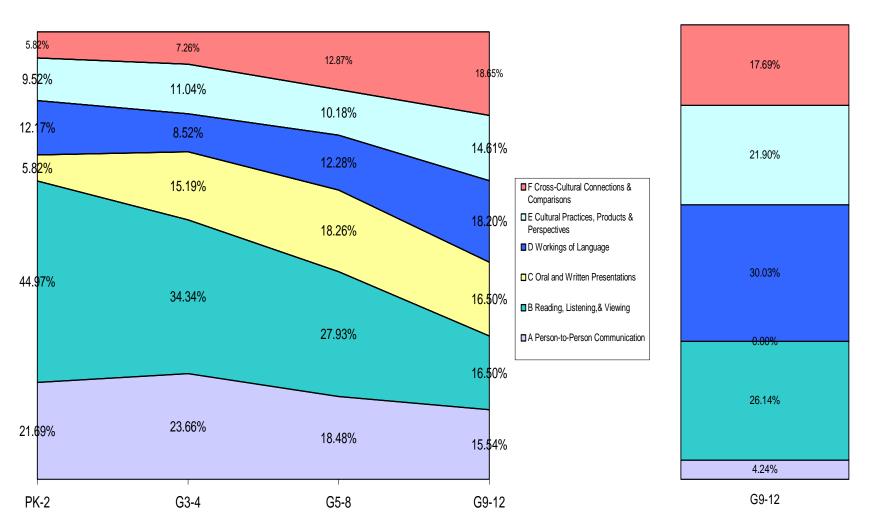
Maine Department of Education • Maine Mathematics and Science Alliance

Mathematics Content Standards Weightings



Modern Languages Content Standards Ratings

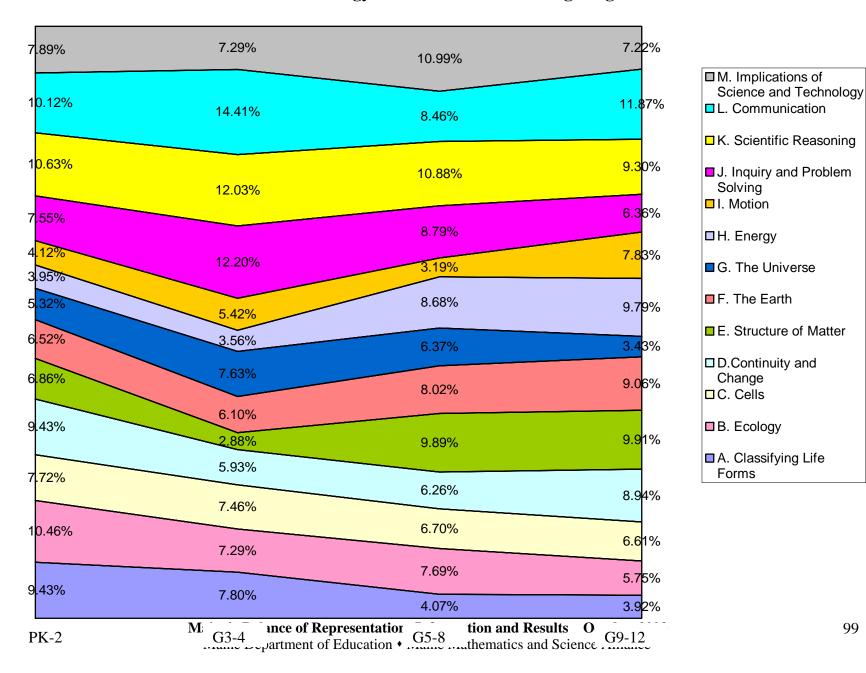
Classical Languages Content Standards Ratings



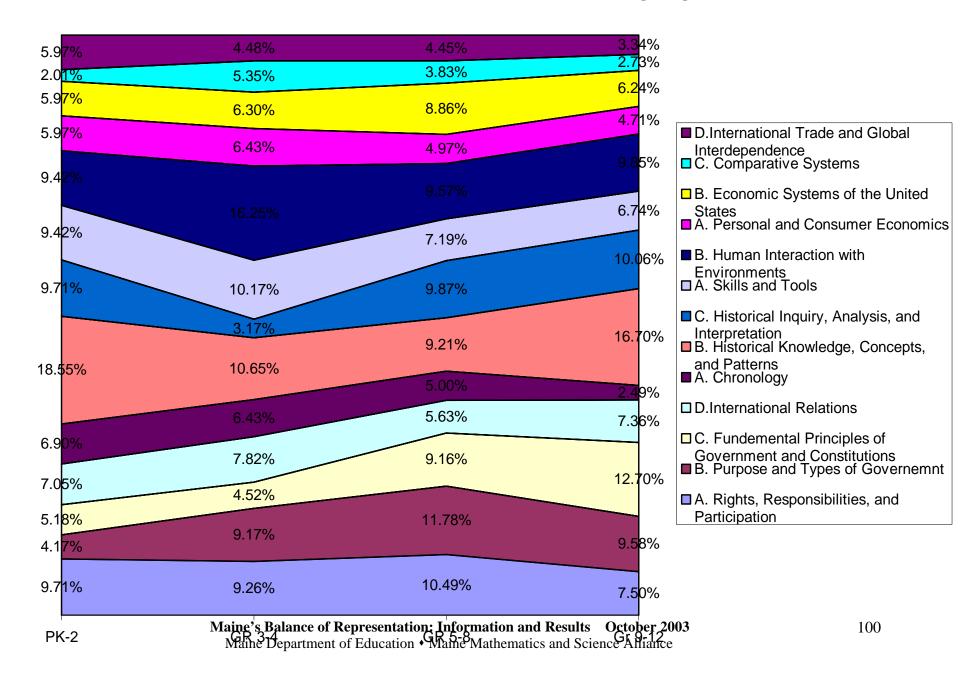
Due to the current scarcity of classical programs below grade 9 in Maine Schools, the participants representing the classical languages at the Balance of Representation Institute had the expertise and experience to produce ratings for the 9-12 grade span only.

171ume Department of Datemion 171ume 171umentument und Defence 1111ume

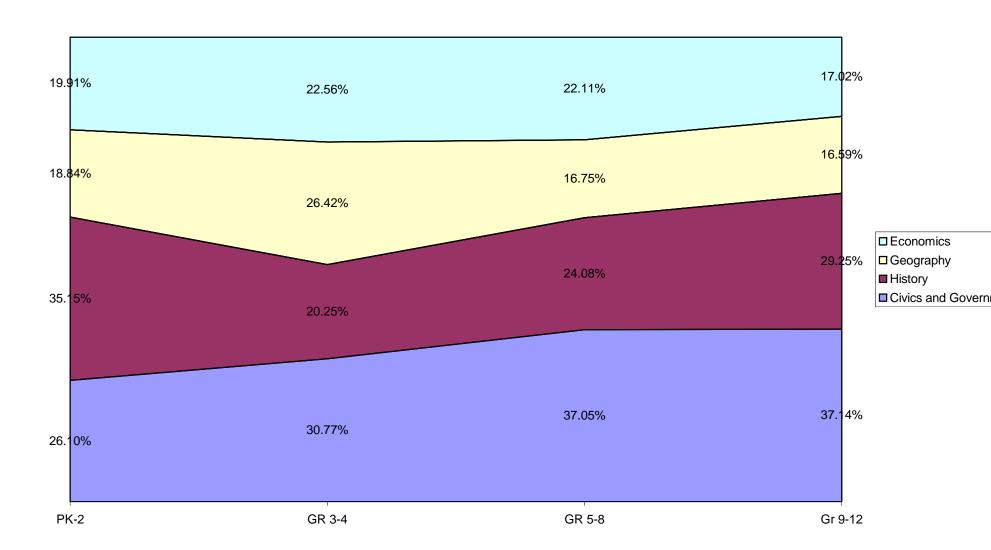
Science and Technology Content Standards Weightings



Social Studies Content Standards Weightings



Balance of Representation of Social Studies Clusters



Visual and Performing Arts Content Standards Weightings

